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Stormwater Pollution Control Plan

Evraz Inc. NA

General Permit 1200Z

File No. 64905

**Evraz Oregon Steel - Rivergate Site
14400 North Rivergate Drive
Portland, Oregon 97203
Multnomah County**

**Site Contact: Drew Gilpin
Ph. (503) 978-6189**

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1 Introduction

This Stormwater Pollution Control Plan (SWPCP) covers the operations of the Evraz Inc. NA, Evraz Oregon Steel facility (EOS), located at 14400 North Rivergate Drive, in Portland, Oregon. The plan was prepared in accordance with the requirements of the Oregon Department of Environmental Quality (DEQ) National Pollutant Discharge Elimination System (NPDES) Stormwater Discharge General Permit Number 1200-Z issued to EOS under File Number 64905.

This Plan describes the facility and its operations, identifies potential sources of stormwater pollution, describes control measures that are in place to prevent and/or treat stormwater pollution, and provides for annual plan review. This plan is an update of the previous stormwater pollution control plan (dated May 2, 2007) and is retained on file in the facility Environmental Department office at all times.

1.1 General Plant Information

Figure 1 shows the geographic location of the EOS Rivergate facility. EOS manufactures steel plate and intermediate plate products at the Rivergate facility. The major operations at the facility are plate rolling, cutting, surface processing, and spiral weld pipe manufacturing. The primary support operations at the plant are maintenance, service water treatment, and transport of materials and products. The facility currently employs approximately 500 people.

The facility has a Standard Industrial Classification (SIC) code of 3312: Steel Works, and Rolling Mills. Pipe manufacturing has the additional classification of 3317: Steel Pipe and Tubes.

1.2 EOS Commitment to Stormwater Pollution Control

EOS maintains a written corporate environmental policy statement that clearly outlines the company's commitment to comply with all relevant environmental laws and regulations, and to educate employees accordingly has developed and implemented an Environmental Management System modeled after ISO 14000 standards. EOS routinely reviews and evaluates products used in processing, fabrication, and maintenance for hazardous contents and, where possible, replaces with non-hazardous substitutes.

1.3 Preparation and Implementation of SWPCP

The Stormwater Pollution Prevention Team is responsible for developing, preparing, implementing, maintaining, and revising this SWPCP. The members of the team are knowledgeable in stormwater management and familiar with the operations of the facility and compliance with environmental regulations. The team members are:

Mr. Drew Gilpin – Manager of Energy and Environment
Office Phone: (503) 978-6189

Ms. Debbie Deetz-Silva – Environmental Specialist
Office Phone: (503) 978-6044

These team members have the responsibility to:

- Oversee day-to-day environmental compliance and SWPCP implementation at the facility
- Develop and direct stormwater compliance programs for EOS
- Prepare budgets and schedules for implementation of pollution control measures as specified in the SWPCP
- Maintain and submit required reports and records
- Train employees
- Supervise stormwater inspections and regular site compliance evaluations.

1.4 Certification of Plan

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Certification by Plant Owner/Operator

Signature: _____

Name: Drew Gilpin

Title: Manager of Energy and Environment

Date: _____

Company: Evraz Oregon Steel

2 Site Description

2.1 General Site Location

The Plant is located at 14400 N. Rivergate Boulevard, in Portland, Oregon in the Rivergate industrial area on the Willamette River (Figure 1) less than a mile south of the confluence of the Willamette and Columbia Rivers. The Plant occupies approximately 145 acres bordered on the north by the Port of Portland's potash handling facility at Terminal 5, on the east by the Union Pacific railroad tracks, on the south by N. Ramsey Boulevard and a bulk storage facility owned by Simplot, and on the west by the Willamette River. The main access road to the site is Rivergate Boulevard with entry from the south. Rail spurs connect the site to Union Pacific railroad tracks.

A site map (Figure 2) identifies drainage patterns, buildings, paved (impervious) areas, unpaved (permeable) areas and drainage basins on the EOS Rivergate property. The figure identifies significant structural control systems for stormwater pollution control, the location of wells and wetland and other significant features of the site. The site is predominantly flat in operational areas except for two existing permitted solid waste landfills in the northern portion of the site and an earthen berm along the riverfront.

2.2 Description of Industrial Activities

Current industrial activities conducted at the EOS Rivergate facility are primarily associated with the manufacture of steel plate, coil and intermediate plate steel products from steel slabs. This section describes the industrial activities associated with steel manufacturing at the Rivergate facility.

2.2.1 Steel Manufacturing

Steel slabs are barged to the Port of Portland Terminal 6 and transported to the EOS Rivergate facility via truck. EOS receives steel slabs as the raw material that feeds the Steckel Rolling Mill. Steel slabs are heated in a natural gas fired reheat furnace and mechanically rolled into plate or coil products.

The plate product is stored and distributed to customers from the shipping bays via truck or rail. Some plate product may be sent to Surface Processing on site for further surface preparation or off site to the EOS Heat Treating facility.

The coil product is sold "as is" or transferred to ancillary production facilities including the coil processing line (Cut-to-Length), spiral Pipe Mill located on the Rivergate site or the Structural Tubing Mill located off site. Coil product sent to the offsite Structural Tubing Mill is used to make various sizes of structural tubing. The onsite Cut-to-Length line mechanically uncoils the steel coils and the leveled steel is sheared into plate section lengths and trimmed as specified by the customer. The onsite Pipe Mill runs coiled steel through a splitter and then spirals wound and welded into pipe sections. The pipe is then processed through a Pipe Coating facility also located on site (see Figure 2).

Except for limited processing of scrap metal, loading and unloading of some steel products, all steel manufacturing operations occur under cover in buildings and do not come into contact with stormwater.

The Melt Shop is currently idle (ceased operations in 2003). When the facility does operate, scrap metal from both on-site and off-site sources is processed through the Melt Shop in an electric arc furnace and cast into steel slabs.

Other ancillary operations (described below) that support the manufacturing process include material storage, shipping and receiving, service water treatment system, truck and vehicle maintenance, fueling and general parking.

2.2.2 Material Storage

To the maximum extent practical, materials are confined to specific storage or processing locations (Figure 2). Scrap metal is processed (sized and sorted) and stored in the north eastern area of the site and sold or recycled. Mill scale is stockpiled in the north eastern area of the site and sold. Wood wastes are sorted in this same area and is processed (chipped) and recycled by an outside vendor. Petroleum contaminated soils (when generated) are stored on an impervious surface and kept covered until arrangements are made for offsite transportation and disposal. Steel slabs, finished steel products (plate, coil, pipe), and some process-related equipment are stored outside and uncovered in other designated areas of the site.

Significant materials stored on-site include gasoline diesel and kerosene fuels, propane, water treatment chemicals, water treatment solids, paints and coatings, petroleum products, used oil, antifreeze, flux and spent flux. These materials are stored in buildings or designated cover areas with secondary containment where practicable. Other materials are typically stored inside storage areas at various locations throughout the facility.

Table 1 identifies and describes significant materials that are stored, used treated or disposed of in a manner that could potentially allow exposure to stormwater.

2.2.3 Shipping and Receiving

Generally products and materials brought to the facility by truck or rail include (but are not limited to) steel slabs, petroleum products, water treatment chemicals, store warehouse products and materials, and steel coatings.

Steel products (coil, pipe and plate) are shipped off-site by rail and truck. The primary locations where products are loaded for shipment are the shipping bays at the east end of the Rolling Mill, the Cut-to-Length facility, pipe storage and Surface Processing.

2.2.4 Service Water Treatment System

The service water treatment system located north and west of the Pipe Mill building (Figure 2) treats process contact cooling water used in manufacturing operations. The primary unit operation of the treatment system is sand filtration to remove particulate matter. As required to manage process water quality characteristics and cooling pond water levels, treated process water is occasionally discharged to the Willamette River through a separate outfall in accordance with NPDES waste discharge permit number 101007. As shown in Figure 2, a small amount of surface area east of the cooling pond drains stormwater to the cooling pond where it becomes part of the process water stream.

2.2.5 Truck and Vehicle Maintenance

Several types of mobile equipment are used at the facility. Mobile cranes, switch engines, trucks, back hoes, fork lifts, and front-end loaders are examples. Maintenance of facility vehicles is conducted indoors in the Maintenance Shop building located north of pipe storage area (Figure 2). New and used petroleum materials are stored indoors or under cover in this area of the site. Used oil and used antifreeze are properly contained and stored prior to off-site transfer and recycling in accordance with state and federal regulations.

EOS vehicles are cleaned on the steam cleaning pad located at the carpenter shop between the Maintenance Shop and Surface Processing Buildings (Figure 2). The wash water is collected, treated through an oil water separator, and discharged to the City of Portland sanitary sewer under Industrial Wastewater Discharge Permit number 300.008.

2.2.6 Fueling

Gasoline, kerosene and diesel fuels are stored in and dispensed from aboveground tanks at the southeast corner of the Rolling Mill. Fueling is performed on an engineered containment pad and fuel tanks are outfitted with overfill and spill alarm systems. Any fuel spills onto of the containment pad are directed to an oil/water separator where oil is trapped and can be vacuumed before discharge to the sanitary sewer.

2.2.7 Parking

Employee parking for the administration building is located north of that building. Parking for the majority of plant employees is located north of Surface Processing (Figure 2). The stormwater vegetated swale system for the parking surface was designed in accordance with the City of Portland Stormwater Management Manual (SWMM).

2.3 Stormwater Outfalls

All stormwater is contained on site and either drains by sheet flow to a system of catch basins and through treatment systems or percolates into unpaved ground surfaces. The storm sewer system conveys runoff to the Northern Outfall 003 and Rivergate Outfall 002 as shown in Figure 2. Northern Outfall 003 discharges stormwater directly to the Willamette River. Rivergate Outfall 002 discharges stormwater to a City of Portland storm sewer system. A third outfall, Central Emergency Outfall 001, has been inactive since February, 2009. The Central Emergency Outfall 001 can discharge directly to the Willamette River in the event of an extreme situation and only after a guillotine gate is manually opened.

The EOS storm sewer pipes are typically constructed from reinforced concrete except for Northern Outfall 003 where newer sections are constructed with high density polyethylene (HDPE), and the inactive Central Emergency Outfall 001 interconnect to the treatment system that is constructed of HDPE & steel pipe.

2.3.1 Central Emergency Outfall 001

Central Emergency Outfall 001 has been inactive since February, 2009. Storm water from drainage basins B, C, D is directed to the Central Pump Station located up the pipe from the Central Emergency Outfall 001. The Central Pump Station pumps accumulated

storm water to the end of pipe treatment system and ultimately discharges through the Northern Outfall 003.

There is a guillotine gate that can be manually opened to allow flow through the Central Emergency Outfall 001 in the event of an extreme storm event (greater than 100 year storm) or other situation that would require such emergency measures.

2.3.2 Rivergate Outfall 002

Rivergate Outfall 002 discharges stormwater to a City of Portland storm sewer system. Roof runoff from the Pipe Mill building and discharge from the pipe storage yard that is treated through a sand filter system are discharged to the City of Portland storm sewer system.

Swale treated stormwater from the employee parking lot and storm water from the administration parking lot area is discharged into the City storm sewer line in the turn-around at the end of Rivergate just west of the EOS Administration building.

The City's storm sewer pipe travels south down Rivergate and is combined with other storm water from other industrial areas at N. Ramsey Blvd. and ultimately discharges into the Willamette River via City of Portland Outfall 053A.

The estimated amount of impervious surface area acres that drains to Rivergate Outfall 002 is 8.2 acres. The estimated amount of pervious surface area acres that drains to the Rivergate Outfall 002 is 1.2 acres. The sampling location for storm water monitoring is the manhole directly northeast of the sand filter just inside the entrance gate west of the Administration building (Figure 2).

2.3.3 Northern Outfall 003

Northern Outfall 003 discharges directly to the Willamette River through a pipe located on the riverbank approximately 400 feet south of the northern property boundary. Upstream of the discharge location is a comprehensive treatment system where the majority of the suspended solids settle out in a clarification basin prior to discharge. Water is mechanically pumped at the Central Pump Station to the treatment system prior to discharge through Northern Outfall 003

The estimated amount of impervious surface area acres that drains to Northern Outfall 003 is 33.6 acres. The estimated amount of pervious surface area acres that drains to the Northern Outfall 003 is 63.2 acres. The sampling location for storm water monitoring is the outfall as it discharges to the Willamette River (Figure 2).

2.4 Drainage Basin Descriptions

Figure 2 shows the estimated locations, configurations, and surface areas of drainage basins on the EOS Rivergate property as determined by analysis of surface topography. Collected runoff from basins A through E, G and I discharge to one of the two active stormwater outfalls. Runoff from basins F and H infiltrate into the ground.

2.4.1 Drainage Basin A

Drainage Basin A services the northern side of the facility, including the north side of the Rolling Mill, Cut-To-Length facility, coil storage, and runoff from southern portions of the landfills. This outfall was renovated in 1997 in conjunction with the construction of the steckel Rolling Mill. At that time, a Vortechnics™ system was installed at the end of the drainage line to treat the stormwater. After the Vortechnics™ system, stormwater is mechanically pumped at the Northern Pump Station to the end of pipe treatment system prior to discharge through Northern Outfall 003.

2.4.2 Drainage Basin B

Drainage Basin B occupies the central manufacturing area of the site including the northern portion of the Melt Shop (currently idled) and southern portion of the Rolling Mill. A significant portion of the area between the Rolling Mill and Melt Shop buildings is used for temporary slab storage prior to rolling. Groundwater infiltrates into compromised storm water pipes in the slab storage area. Stormwater runoff and groundwater infiltrating compromised storm water pipes is mechanically pumped at the Central Pump Station to the end of pipe treatment system prior to discharge through Northern Outfall 003.

2.4.3 Drainage Basin C

Drainage Basin C occupies a large track in the southwest portion of the property extending from the southern half of the Melt Shop to the Pipe Mill and from the earthen berm along the riverbank to Surface Processing. All surface runoff in this area drains to the Central Pump Station or percolates into the ground as portions of the basin area remain unpaved. Storm water from this area is mechanically pumped at the Central Pump Station to the end of pipe treatment system prior to discharge through Northern Outfall 003.

2.4.4 Drainage Basin D

Drainage Basin D is occupied by the Pipe Mill, and a portion of the Coating Mill. The land surface within Drainage Basin D is generally not paved. Roof runoff from the Pipe Mill building is split. Approximately 20% of Pipe Mill roof runoff drains to the Central Pump Station and is pumped to the end of pipe treatment system and discharges through Northern Outfall 003. Approximately 80% of the Pipe Mill roof runoff drains to the Rivergate Outfall 002.

The ground surface runoff in Drainage Basin D is collected and directed west to treatment equipment (sequential Vortechs™ and Stormfilter™) for reduction of suspended solids prior to being pumped at the Central Pump Station to the end of pipe treatment system and discharged through Northern Outfall 003.

2.4.5 Drainage Basin E

Drainage Basin E is an unpaved basin that covers the far northeastern corridor of the facility. A drain line was installed to convey percolated stormwater originating in the material processing area (east of the East Landfill) and runoff from the north side of the East Landfill. This water is conveyed west prior to being pumped at the Northern Pump Station to the end of pipe treatment system and discharged through Northern Outfall 003.

2.4.6 Drainage Basin F

Drainage Basin F is unpaved and does not contain stormwater management infrastructure. Runoff in this area collects in topographic lows and infiltrates the ground surface.

2.4.7 Drainage Basin G

Drainage Basin G features the employee parking lot constructed in 2007. Stormwater runoff from the parking lot drains through and is treated within interior vegetated swales. Following treatment, the runoff is discharged to the Rivergate Outfall 002.

2.4.8 Drainage Basin H

Drainage Basin H was redeveloped in 2007 for onsite transport and storage of pipe. All runoff collected within Basin H is directed south to an infiltration basin and does not discharge to any outfall.

2.4.9 Drainage Basin I

Drainage Basin I was redeveloped in 2007 for onsite transport and storage of pipe. Runoff in Basin I is treated sequentially through a vegetated swale and sand filter before being discharged to Rivergate Outfall 002.

2.5 Reasonable Potential Stormwater Pollutants

Table 1 lists the operational areas that have stormwater runoff contributing flow to the outfalls, describes industrial activities in each area that have a potential exposure to stormwater, lists the potential pollutants, and indicates the outfall(s) to which each area drains. Figure 2 identifies the various operations and their locations.

Although all of the following materials are handled, used, and stored in accordance with best management practices (BMPs), there are materials (to the extent known by the permittee) that have been handled, or stored, at the facility in a manner which could allow exposure to stormwater. These include: steel slabs; other finished steel products (coil, pipe); scrap metal, slag, oil and chemical products for vehicle and equipment maintenance; used oil and chemicals from vehicle and equipment maintenance; trash (stored in dumpsters); baghouse dust; gasoline, kerosene and diesel fuels; equipment storage; paints; spent flux and mill scale. The use and disposal of significant materials and potential pollutants are listed according to source area in Table 1.

2.6 Groundwater Discharged to Stormwater System

Groundwater infiltrates the storm sewer system at various system pipe joints and sleeve connections as well as fracture points that are below the groundwater level. Groundwater infiltration is negligible in Drainage Basin D that discharges to Rivergate Outfall 002. Significant groundwater infiltration has been observed in Drainage Basins B and C (video inspection and dry weather flow). Modest dry weather flows are also observed in Drainage Basin A. Groundwater infiltration from in the storm sewer system these drainage basins (B, C and A) is ultimately pumped at the Central and Northern Pump Stations to the end of pipe treatment system and discharged through Northern Outfall 003.

In addition, groundwater that accumulates in the No. 1 Shear Electrical Vault is pumped to the storm sewer and ultimately pumped at the Central Pump Station to the end of pipe treatment system and discharged through Northern Outfall 003. Also, seasonally shallow groundwater is discharged from two sumps at the east end of the Rolling Mill (Shipping) to the storm drain system that is directed to the Northern Pump Station to the end of pipe treatment system and discharged through Northern Outfall 003.

3 Site Controls for Stormwater Pollution Prevention

This section describes the appropriate stormwater pollution site controls that have been developed, implemented and maintained for the EOS Rivergate site. The purpose of these site controls is to minimize the amount of pollutants in stormwater discharged from the facility.

3.1 Stormwater Best Management Practices

A variety of stormwater pollution controls, structural modifications and management practices have been implemented to minimize pollution of stormwater runoff from the Evraz Oregon Steel – Rivergate site. Existing stormwater best management practices (BMPs) are described as follows:

3.1.1 Containment

Topographic barriers prevent stormwater discharges from portions of the site (e.g., Drainage Basin F and H). Stormwater in these basins percolates into the ground.

Drip pans, where feasible, are placed under equipment and vehicles to capture leaks. A containment pad for fueling is engineered and installed to contain a large release of fuel (gasoline, diesel and kerosene). The fueling containment pad is designed with an oil/water separator and discharges to the sanitary sewer system.

Hazardous substances are stored as required within berms, or other secondary containment devices (indoor storage areas and buildings) to prevent leaks and spills from entering the storm drain system.

Discharges from the sandblasting and steam cleaning area east of the Maintenance Building are collected and treated through an oil/water separator prior to discharge to the City sanitary sewer.

The main substation (South of the Melt Shop) has an engineered liner and berm system that prevents transformer releases from this area entering the storm drain system.

3.1.2 Oil and Grease

Petroleum products and spent or recyclable petroleum materials are contained, labeled, stored and managed in designated areas. There are no routine operations in exposed areas where oil/water separators, booms or skimmers are needed to manage oil and grease residues to the storm drain system.

The end-of-pipe treatment system installed just up the pipe from Northern Outfall 003 includes a clarification basin. The clarification basin consists of three partitioned sections of an earthen basin. Each of the partitioned sections is equipped with a hard boom as a preventative measure to capture any petroleum prior to discharge in the event of release of oil to the storm sewer system. In addition, at the southern end of the third partitioned section of the clarification basin, prior to discharge to the Northern Outfall 003 there is installed a “goose neck” oil/water separator system.

3.1.3 Waste Chemicals and Material Disposal

Wastes and recyclable materials (e.g., used oil, water treatment solids, antifreeze) are properly contained and stored in designated areas. Wastes and chemicals are managed according to State and Federal regulations.

3.1.4 Debris, Erosion and Sediment Control

An end-of-pipe treatment system has been installed up the pipe from the Northern Outfall 003 to collect and treat stormwater runoff from Drainage Basins A, B, C, D and E. Stormwater accumulation in lift station sumps at the end of drainage basins A, B, C, D and E activates submersible stormwater pumps which send the water to the treatment system. The Central and Northern Pump Stations deliver stormwater to the north end of the clarification basin at a constant rate. Chemical metering pumps activate simultaneously and inject chemical coagulant into the stormwater as it passes through the system. The coagulant and stormwater combine in the delivery pipe between the injection point and the point at which the amended stormwater discharges to the north end of the clarification basin.

The clarification basin consists of three partitioned sections of an earthen basin. The basin provides hydraulic retention of >30 minutes at the maximum lift station pumping rate. This allows for sufficient settling of suspended solids prior to discharge through the Northern Outfall 003. Over-dosing of treatment chemical cannot occur because the treatment chemical is metered at a constant rate and is injected only during a storm event when the lift station pumps are activated. At the southern end of the third partitioned section of the clarification basin, prior to discharge to the Northern Outfall 003 there is installed a “goose neck” oil/water separator system.

Where economically feasible, road surfaces are paved. This prevents soil erosion and transport into the storm sewer system. All paved areas are inspected and mechanically swept routinely to prevent excessive buildup of soil tracked or wind-blown onto the pavement from adjacent unpaved surfaces. Unpaved areas are wetted during extended dry periods to control dust formation and transport.

Storm drain inlets (catch basins) are inspected and cleaned as needed, based on results of monthly drainage inspections. Fabric filters are used where necessary to reduce sediment intake.

Vegetated swales have been incorporated into the employee parking area Drainage basin G. A vegetated swales and sand filter treats stormwater from Drainage Basin I. An infiltration basin collects stormwater from Drainage Basin H and does not discharge to any outfall.

3.1.5 Stormwater Diversion

Manufacturing operations are performed in buildings which prevents direct contact with potential pollutants. The small petroleum fueling pad near the southeast corner of the Rolling Mill Shipping Bay is plumbed to an oil/water separator before discharge to sanitary sewer to prevent releases from entering the stormwater system. Wash water from steam cleaning and sandblasting operations at the Maintenance Building is collected, pretreated, and discharged to City sanitary sewer under Industrial Wastewater Discharge Permit number 300.008.

3.1.6 Covering Activities

Most manufacturing and maintenance operations are conducted inside buildings. Roof coverings have been constructed at several areas throughout the facility:

- Oil storage area at the north side of the maintenance shop
- Oil recycling area at the Rolling Mill scale pit.

Oily or greasy equipment items are stored under cover. If these materials must be stored outdoors, they are kept covered when practical and feasible.

Hazardous substances and recyclable materials are stored indoors or in closed containers.

3.1.7 Good Housekeeping Practices

Paved areas of the site (mainly roads) are routinely swept using a powered mobile sweeper to reduce the potential for pollutant loading to the storm sewer.

Spills and leaks around the site are promptly addressed (see Section 3.2).

A vehicle and mobile equipment maintenance program is implemented. Most routine maintenance is performed on site inside the Maintenance Shop (see Section 3.3). Dry methods (e.g., sweeping or vacuuming instead of washing) are used in maintenance areas for cleaning in areas where stormwater could be impacted.

Trash receptacles (dumpsters) are located throughout the facility to minimize accumulations of litter and debris. EOS maintains a recycling program for recyclable materials such as paper, cardboard and wood and scrap metal.

3.2 Spill Prevention and Response

Potential causes of spills or leaks at the Rivergate facility could include equipment or vehicle leaks, container failures, and materials handling activities. Frequent inspections of storage areas, manufacturing/process areas, regular equipment and vehicles maintenance and an education program, reduce the likelihood for spills and help ensure that identified spills are cleaned up immediately before entering the storm drain system.

Emergency spill kits are located throughout the Plant. In the event of a spill, these kits are available for spill cleanup and to prevent the spill from reaching the storm drain system. In addition, large quantities of absorbent materials are kept in stock at the stores

warehouse. Outside contractors are utilized when necessary for incidents that need additional assistance or expertise.

The Central and Northern Pump Stations deliver stormwater from a majority of the facility to the north end of the end of pipe treatment system clarification basin. The clarification basin consists of three partitioned sections of an earthen basin. Each of the partitioned sections is equipped with a hard boom as a preventative measure to capture any petroleum prior to discharge in the event of release of oil to the storm sewer system. In addition, at the southern end of the third partitioned section of the clarification basin, prior to discharge to the Northern Outfall 003 there is installed a “goose neck” oil/water separator system.

Small or *de minimus* oil releases that do not pose a known and verifiable threat to surface waters (i.e. small areas of stained gravel in vehicle or equipment storage areas) are addressed when practical and subject to the judgment of on-site personnel. EOS will continue to evaluate and implement measures to eliminate or minimize the number and extent of these minor or *de minimus* releases.

Oregon Revised Statute 465.605(10) requires notification of a spill of a reportable quantity on land of one barrel (42 gallons) or any quantity of oil that would produce a visible sheen on navigable waters of the state. If a spill occurs that meets the reportable criteria, regulatory authorities (DEQ, US Coast Guard, EPA and City of Portland) are notified of the incident.

EOS maintains on site procedures used for cleanup and notification of spills. These procedures are described in Appendix A.

3.3 Preventive Maintenance Measures

A preventive maintenance program is implemented at the Rivergate facility and involves the regular inspections, cleaning, and any necessary repair of equipment and stormwater management structures, along with other activities that reduce the likelihood of spills and leaks including:

1. Monthly inspections of areas where there is a potential for materials or industrial activities could impact the storm water system. Sample copies of the stormwater inspection forms are located in Appendix B.
2. Monthly inspections of storm water control systems including the end of pipe treatment system, vegetated swales, sand filter system, storm water catch basin system. Sample copies of the stormwater inspection forms are located in Appendix B.
3. Periodic maintenance (cleaning, catch basin filter replacement, pump inspections, structural repairs) is performed on the various storm water treatment system infrastructures. Frequency is determined by results of inspections or as needed upon discovery. All periodic maintenance is performed in a manner as to prevent discharges of pollutants.

3.4 Employee Education and Training

EOS educates and trains operating and maintenance personnel (and supervisors) on the importance and benefits of stormwater pollution prevention, elements of the SWPCP, and spill prevention and response procedures. Training occurs when an employee is initially hired and annually thereafter. Site tenants also receive regular storm water training and a copy of this plan.

A typical EOS stormwater training plan is outlined in Appendix C. Training addresses actions and conditions that cause stormwater pollution, effective implementation of the control measures presented in this plan, proper inspection, handling, and storage procedures to prevent stormwater pollution, applicable inspection and maintenance programs and spill response procedures. Information related to stormwater pollution prevention is also presented, as appropriate, at departmental meetings. Training records are maintained at the environmental office.

4 Record Keeping and Internal Reporting Procedures

This SWPCP, all inspection and site compliance evaluation records, related training records, records of spills and corrective action, preventative maintenance records and monitoring results will be retained at the facility as required.

Reporting activities will include tabulating sampling data and submitting a report to the DEQ Northwest Regional Office and the City of Portland Bureau of Environmental Services on approved forms by July 15 of each year.

These records maintained on site in accordance with applicable record retention policies and will be made available, upon request, to DEQ or authorized representatives of the DEQ i.e. the City of Portland.

Tables

Figures

Appendix A

**Spill Notification and Response Procedures
and Report Form**

Appendix B

Example of

Stormwater Site Control Inspection Forms

Appendix C

Example of

Stormwater and Spill Prevention Training Outline

Table 1 Summary of Surface Soil (0-3 feet bgs) Results

Table 1 Summary of Surface Soil (0-3 feet bgs) Results

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					Location ID B-37 1.5-2.0-0905	B-37 9/7/2005 SO N	S-10A SO02-064 SO N	S-10B SO02-065 10/24/2002 SO N	S-11 SO02-033 10/21/2002 SO N	S-12 SO02-051 10/23/2002 SO N	S-13 SO02-035 10/21/2002 SO N	S-14 SO02-052 10/23/2002 SO N	S-15 SO02-053 10/23/2002 SO N
Chemical Name	Unit	PHSL (toxicity)	PHSL (bio- accumulation)	Action Level Unit									
NWTPH-Dx													
Diesel Range B	mg/kg				NA	30 JN	86 JN	11 JN	110 JN	34 JN	6.5 JN	25 JN	
Residual Range C	mg/kg				NA	230 JN	720 JN	76 JN	1,300 JN	160 JN	44 JN	250 JN	
Diesel Range Hydrocarbons	mg/Kg				NA	NA	NA	NA	NA	NA	NA	NA	
Residual Range Organics (RRO)	mg/Kg				NA	NA	NA	NA	NA	NA	NA	NA	

Bold and Shaded

Detected result exceeds Upland Soil/Stormwater Sediment Screening Level (Toxicity)

Bold and Inverted

Detected result exceeds Upland Soil/Stormwater Sediment Screening Level (Bioaccumulation)

Bold and Highlighted

Detected result exceeds both Upland Soil/Stormwater Sediment Screening Levels (Bioaccumulation and Toxicity)

Bold and Blue

Detection Limit for ND exceeds one or both screening levels.

bgs - below ground surface

PHSL - Portland Harbor Screening Level

Total PCBs equal to sum of detected PCB aroclor values or the highest method reporting limit if all PCB aroclors are non-detect

Table 1 Summary of Surface Soil (0-3 feet bgs) Results

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Table 1 Summary of Surface Soil (0-3 feet bgs) Results

					Location ID Sample ID Sample Date Sample Matrix Sample Type	S-16 SO02-054 10/23/2002 SO N	S-17 SO02-055 10/23/2002 SO N	S-19 S19-SO0175 9/29/2003 SO N	S-2 SO02-028 10/22/2002 SO N	S-20 S20-SO0173 9/29/2003 SO N	S-21 S21-SO0171 9/29/2003 SO N	S-22 S22-SO0176 9/29/2003 SO N	S-23 S23-SO0172 9/29/2003 SO N
Chemical Name	Unit	PHSL (toxicity)	PHSL (bio- accumulation)	Action Level Unit									
NWTPH-Dx													
Diesel Range B	mg/kg				7,000	JN	150	JN	NA	200	JN	NA	NA
Residual Range C	mg/kg				24,000	JN	620	JN	NA	410	JN	NA	NA
Diesel Range Hydrocarbons	mg/Kg				NA		NA		NA	NA		NA	NA
Residual Range Organics (RRO)	mg/Kg				NA		NA		NA	NA		NA	NA

Bold and Shaded

Detected result exceeds Upland Soil/Stormwater Sediment Scr

Bold and Inverted

Detected result exceeds Upland Soil/Stormwater Sediment Scr

Bold and Highlighted

Detected result exceeds both Upland Soil/Stormwater Sedimer

Bold and Blue

Detection Limit for ND exceeds one or both screening levels.

bgs - below ground surface

PHSL - Portland Harbor Screening Level

Total PCBs equal to sum of detected PCB aroclor values or the highest method reporting limit if all PCE

Table 1 Summary of Surface Soil (0-3 feet bgs) Results

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Table 1 Summary of Surface Soil (0-3 feet bgs) Results

					Location ID Sample ID Sample Date Sample Matrix Sample Type	S-24 S24-SO0170 9/29/2003 SO N	S-25 S25-SO0178 9/29/2003 SO N	S-26 S26-SO0188 9/30/2003 SO N	S-27 S27-SO0169 9/29/2003 SO N	S-28 S28-SO0168 9/29/2003 SO N	S-29 S29-SO0167 9/29/2003 SO N	S-3 SO02-027 10/22/2002 SO N	S-30 S30-SO0166 9/29/2003 SO N	S-31 S31-SO0165 9/29/2003 SO N
Chemical Name	Unit	PHSL (toxicity)	PHSL (bio- accumulation)	Action Level Unit										
NWTPH-Dx														
Diesel Range B	mg/kg				NA	NA	NA	NA	NA	NA	34	JN	NA	
Residual Range C	mg/kg				NA	NA	NA	NA	NA	NA	210	JN	NA	
Diesel Range Hydrocarbons	mg/Kg				NA	NA	NA	NA	NA	NA	NA	NA	NA	
Residual Range Organics (RRO)	mg/Kg				NA	NA	NA	NA	NA	NA	NA	NA	NA	

Bold and Shaded

Detected result exceeds Upland Soil/Stormwater Sediment Scr

Bold and Inverted

Detected result exceeds Upland Soil/Stormwater Sediment Scr

Bold and Highlighted

Detected result exceeds both Upland Soil/Stormwater Sedimer

Bold and Blue

Detection Limit for ND exceeds one or both screening levels.

bgs - below ground surface

PHSL - Portland Harbor Screening Level

Total PCBs equal to sum of detected PCB aroclor values or the highest method reporting limit if all PCE

Table 1 Summary of Surface Soil (0-3 feet bgs) Results

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Table 1 Summary of Surface Soil (0-3 feet bgs) Results

					Location ID Sample ID Sample Date Sample Matrix Sample Type	S-32 S32-SO0163 9/29/2003 SO N	S-33 S33-SO0164 9/29/2003 SO N	S-34 S34-SO0160 9/29/2003 SO N	S-35 S35-SO0161 9/29/2003 SO N	S-4 SO02-029 10/22/2002 SO N	S-40 S40-SO0185 9/30/2003 SO N	S-41 S41-SO0186 9/30/2003 SO N	S-42 S42-SO0179 9/29/2003 SO N	S-45a S45a-SO0196 9/30/2003 SO N
Chemical Name	Unit	PHSL (toxicity)	PHSL (bio- accumulation)	Action Level Unit										
NWTPH-Dx														
Diesel Range B	mg/kg					NA	NA	NA	NA	69 JN	NA	NA	NA	
Residual Range C	mg/kg					NA	NA	NA	NA	490 JN	NA	NA	NA	
Diesel Range Hydrocarbons	mg/Kg					NA	NA	NA	NA	NA	NA	NA	NA	
Residual Range Organics (RRO)	mg/Kg					NA	NA	NA	NA	NA	NA	NA	NA	

Bold and Shaded

Detected result exceeds Upland Soil/Stormwater Sediment Scr

Bold and Inverted

Detected result exceeds Upland Soil/Stormwater Sediment Scr

Bold and Highlighted

Detected result exceeds both Upland Soil/Stormwater Sedimer

Bold and Blue

Detection Limit for ND exceeds one or both screening levels.

bgs - below ground surface

PHSL - Portland Harbor Screening Level

Total PCBs equal to sum of detected PCB aroclor values or the highest method reporting limit if all PCE

Table 1 Summary of Surface Soil (0-3 feet bgs) Results

					Location ID S46a-SO0203	S-46a 10/1/2003 SO N	S-47a S47a-SO0205 10/1/2003 SO N	S-48a S48a-SO0208 10/1/2003 SO N	S-49a S49a-SO0200 10/1/2003 SO N	S-5 SO02-026 10/22/2002 SO N	S-55a S-55a-0805 8/30/2005 SO N	S-57a S-57a-0905 9/1/2005 SO N	S-59a S-59a-0905 9/1/2005 SO N	S-6 SO02-030 10/22/200 SO N
Chemical Name	Unit	PHSL (toxicity)	PHSL (bio- accumulation)	Action Level Unit										
Conventionals														
Solids, Total	%					NA	NA	NA	NA	NA	89.9	93.6	95.2	
Total Solids	%					86	92.6	83.4	94.4	93	NA	NA	95	
Carbon, Total Organic (TOC)	%					NA	NA	NA	NA	NA	0.44	0.34	0.76	
Metals														
Chromium	mg/Kg	111		mg/kg		NA	NA	NA	NA	NA	127 J-	335 J-	30.3 J-	
Manganese	mg/Kg	1100		mg/kg		NA	NA	NA	NA	NA	1,200 J	3,090 J	478 J	
Arsenic	mg/Kg	33	7	mg/kg		NA	NA	NA	NA	NA	6.39	9.49	4.48	
Cadmium	mg/Kg	4.98	1	mg/kg		NA	NA	NA	NA	NA	< 0.238	1.06	0.480	
Copper	mg/Kg	149		mg/kg		NA	NA	NA	NA	NA	24.6	130	22.5	
Lead	mg/Kg	128	17	mg/kg		NA	NA	NA	NA	NA	8.95	10.3	33.7	
Zinc	mg/Kg	459		mg/kg		NA	NA	NA	NA	NA	73.4	76.3	192	
PCB Congeners														
PCB 1	mg/kg					NA	NA	NA	NA	NA	0.00001492 J	NA	NA	
PCB 10	mg/kg					NA	NA	NA	NA	NA	< 0.000004467	NA	NA	
PCB 103	mg/kg					NA	NA	NA	NA	NA	0.00006153	NA	NA	
PCB 104	mg/kg					NA	NA	NA	NA	NA	< 0.000044672	NA	NA	
PCB 105	mg/kg	.00017		mg/kg		NA	NA	NA	NA	NA	0.00234484	NA	NA	
PCB 107+124	mg/kg					NA	NA	NA	NA	NA	< 0.000089345	NA	NA	
PCB 109+106+123	mg/kg	.00021		mg/kg		NA	NA	NA	NA	NA	0.00062624	NA	NA	
PCB 11	mg/kg					NA	NA	NA	NA	NA	0.00013154	NA	NA	
PCB 110+115	mg/kg					NA	NA	NA	NA	NA	0.00764264	NA	NA	
PCB 111	mg/kg					NA	NA	NA	NA	NA	< 0.000089345	NA	NA	
PCB 118	mg/kg	.00012		mg/kg		NA	NA	NA	NA	NA	0.00349541	NA	NA	
PCB 12+13	mg/kg					NA	NA	NA	NA	NA	< 0.000008934	NA	NA	
PCB 120	mg/kg					NA	NA	NA	NA	NA	< 0.000044672	NA	NA	
PCB 121	mg/kg					NA	NA	NA	NA	NA	< 0.000044672	NA	NA	
PCB 122+114	mg/kg	.00017		mg/kg		NA	NA	NA	NA	NA	0.00024907	NA	NA	
PCB 126	mg/kg	.00000005		mg/kg		NA	NA	NA	NA	NA	0.00002402	NA	NA	
PCB 127	mg/kg					NA	NA	NA	NA	NA	< 0.000089345	NA	NA	
PCB 128+166	mg/kg					NA	NA	NA	NA	NA	0.00041121	NA	NA	
PCB 129+138+160+163	mg/kg					NA	NA	NA	NA	NA	0.00241356	NA	NA	
PCB 130+137+164	mg/kg					NA	NA	NA	NA	NA	0.00012745	NA	NA	
PCB 131+142	mg/kg					NA	NA	NA	NA	NA	0.0000416	NA	NA	
PCB 132	mg/kg					NA	NA	NA	NA	NA	0.00123069	NA	NA	
PCB 133	mg/kg					NA	NA	NA	NA	NA	0.00002921	NA	NA	
PCB 135+151+154	mg/kg					NA	NA	NA	NA	NA	0.00112707	NA	NA	
PCB 136	mg/kg					NA	NA	NA	NA	NA	0.00036035	NA	NA	

Table 1 Summary of Surface Soil (0-3 feet bgs) Results

					Location ID S46a-SO0203	S-46a 10/1/2003 SO N	S-47a S47a-SO0205 10/1/2003 SO N	S-48a S48a-SO0208 10/1/2003 SO N	S-49a S49a-SO0200 10/1/2003 SO N	S-5 SO02-026 10/22/2002 SO N	S-55a S-55a-0805 8/30/2005 SO N	S-57a S-57a-0905 9/1/2005 SO N	S-59a S-59a-0905 9/1/2005 SO N	S-6 SO02-030 10/22/200 SO N
Chemical Name	Unit	PHSL (toxicity)	PHSL (bio- accumulation)	Action Level Unit										
PCB 139+140	mg/kg				NA	NA	NA	NA	NA	NA	0.00003884	NA	NA	
PCB 14	mg/kg				NA	NA	NA	NA	NA	NA	< 0.000008934	NA	NA	
PCB 143	mg/kg				NA	NA	NA	NA	NA	NA	0.00009046	NA	NA	
PCB 144	mg/kg				NA	NA	NA	NA	NA	NA	0.00004737	NA	NA	
PCB 145	mg/kg				NA	NA	NA	NA	NA	NA	< 0.000089345	NA	NA	
PCB 146+161	mg/kg				NA	NA	NA	NA	NA	NA	0.0002644	NA	NA	
PCB 147+134+149	mg/kg				NA	NA	NA	NA	NA	NA	0.00333708	NA	NA	
PCB 148	mg/kg				NA	NA	NA	NA	NA	NA	0.00000268	NA	NA	
PCB 15	mg/kg				NA	NA	NA	NA	NA	NA	0.00019807	NA	NA	
PCB 152+150	mg/kg				NA	NA	NA	NA	NA	NA	0.00000138	NA	NA	
PCB 153+168+141	mg/kg				NA	NA	NA	NA	NA	NA	0.00172963	NA	NA	
PCB 155	mg/kg				NA	NA	NA	NA	NA	NA	< 0.000089345	NA	NA	
PCB 156+157	mg/kg	.00021	mg/kg		NA	NA	NA	NA	NA	NA	0.00020784 J	NA	NA	
PCB 158	mg/kg				NA	NA	NA	NA	NA	NA	0.00018371	NA	NA	
PCB 159	mg/kg				NA	NA	NA	NA	NA	NA	0.00001546	NA	NA	
PCB 162	mg/kg				NA	NA	NA	NA	NA	NA	0.00001379	NA	NA	
PCB 163	mg/kg				NA	NA	NA	NA	NA	NA	0.00030245	NA	NA	
PCB 165	mg/kg				NA	NA	NA	NA	NA	NA	< 0.000089345	NA	NA	
PCB 167	mg/kg	.00021	mg/kg		NA	NA	NA	NA	NA	NA	0.0000812	NA	NA	
PCB 169	mg/kg	.00000021	mg/kg		NA	NA	NA	NA	NA	NA	< 0.000044672	NA	NA	
PCB 17	mg/kg				NA	NA	NA	NA	NA	NA	0.00025957	NA	NA	
PCB 170	mg/kg				NA	NA	NA	NA	NA	NA	0.00044684	NA	NA	
PCB 172	mg/kg				NA	NA	NA	NA	NA	NA	0.00006884	NA	NA	
PCB 175	mg/kg				NA	NA	NA	NA	NA	NA	< 0.000089345	NA	NA	
PCB 176	mg/kg				NA	NA	NA	NA	NA	NA	0.00009673	NA	NA	
PCB 178	mg/kg				NA	NA	NA	NA	NA	NA	0.00040391	NA	NA	
PCB 179	mg/kg				NA	NA	NA	NA	NA	NA	0.00024104	NA	NA	
PCB 18+30	mg/kg				NA	NA	NA	NA	NA	NA	0.00025614	NA	NA	
PCB 180+193	mg/kg				NA	NA	NA	NA	NA	NA	0.00105276	NA	NA	
PCB 181+171+173	mg/kg				NA	NA	NA	NA	NA	NA	0.00017221	NA	NA	
PCB 183+174+185	mg/kg				NA	NA	NA	NA	NA	NA	0.00218596	NA	NA	
PCB 184	mg/kg				NA	NA	NA	NA	NA	NA	< 0.000089345	NA	NA	
PCB 186	mg/kg				NA	NA	NA	NA	NA	NA	< 0.000089345	NA	NA	
PCB 187+182	mg/kg				NA	NA	NA	NA	NA	NA	0.00159482	NA	NA	
PCB 188	mg/kg				NA	NA	NA	NA	NA	NA	< 0.000044672	NA	NA	
PCB 189	mg/kg	.0012	mg/kg		NA	NA	NA	NA	NA	NA	0.00001187	NA	NA	
PCB 19	mg/kg				NA	NA	NA	NA	NA	NA	0.00012702	NA	NA	
PCB 190	mg/kg				NA	NA	NA	NA	NA	NA	0.00006934	NA	NA	

Table 1 Summary of Surface Soil (0-3 feet bgs) Results

					Location ID S46a-SO0203	S-46a 10/1/2003 SO N	S-47a S47a-SO0205 10/1/2003 SO N	S-48a S48a-SO0208 10/1/2003 SO N	S-49a S49a-SO0200 10/1/2003 SO N	S-5 SO02-026 10/22/2002 SO N	S-55a S-55a-0805 8/30/2005 SO N	S-57a S-57a-0905 9/1/2005 SO N	S-59a S-59a-0905 9/1/2005 SO N	S-6 SO02-030 10/22/200 SO N
Chemical Name	Unit	PHSL (toxicity)	PHSL (bio- accumulation)	Action Level Unit										
PCB 191	mg/kg				NA	NA	NA	NA	NA	NA	0.00001551	NA	NA	
PCB 192	mg/kg				NA	NA	NA	NA	NA	NA	< 0.000089345	NA	NA	
PCB 194	mg/kg				NA	NA	NA	NA	NA	NA	0.00022928	NA	NA	
PCB 195	mg/kg				NA	NA	NA	NA	NA	NA	0.00009256	NA	NA	
PCB 196+203	mg/kg				NA	NA	NA	NA	NA	NA	0.00074819	NA	NA	
PCB 197+200	mg/kg				NA	NA	NA	NA	NA	NA	0.00005626	NA	NA	
PCB 198+199	mg/kg				NA	NA	NA	NA	NA	NA	0.00053304	NA	NA	
PCB 2	mg/kg				NA	NA	NA	NA	NA	NA	0.00000303	NA	NA	
PCB 20+21+28+33	mg/kg				NA	NA	NA	NA	NA	NA	0.00018633	NA	NA	
PCB 201	mg/kg				NA	NA	NA	NA	NA	NA	0.00007574	NA	NA	
PCB 202	mg/kg				NA	NA	NA	NA	NA	NA	0.00009093	NA	NA	
PCB 204	mg/kg				NA	NA	NA	NA	NA	NA	0.00001272	NA	NA	
PCB 205	mg/kg				NA	NA	NA	NA	NA	NA	0.00000972	NA	NA	
PCB 206	mg/kg				NA	NA	NA	NA	NA	NA	0.0003023	NA	NA	
PCB 207	mg/kg				NA	NA	NA	NA	NA	NA	0.00003229	NA	NA	
PCB 208	mg/kg				NA	NA	NA	NA	NA	NA	0.0000931	NA	NA	
PCB 209	mg/kg				NA	NA	NA	NA	NA	NA	0.00010173	NA	NA	
PCB 22	mg/kg				NA	NA	NA	NA	NA	NA	0.00114491	NA	NA	
PCB 25	mg/kg				NA	NA	NA	NA	NA	NA	0.00074386	NA	NA	
PCB 26+29	mg/kg				NA	NA	NA	NA	NA	NA	0.00011615	NA	NA	
PCB 27+16+24	mg/kg				NA	NA	NA	NA	NA	NA	0.00008438	NA	NA	
PCB 3	mg/kg				NA	NA	NA	NA	NA	NA	0.00000784 J	NA	NA	
PCB 31	mg/kg				NA	NA	NA	NA	NA	NA	0.00265748	NA	NA	
PCB 32	mg/kg				NA	NA	NA	NA	NA	NA	0.00100457	NA	NA	
PCB 34+23	mg/kg				NA	NA	NA	NA	NA	NA	< 0.000017869	NA	NA	
PCB 35	mg/kg				NA	NA	NA	NA	NA	NA	0.00007266	NA	NA	
PCB 36	mg/kg				NA	NA	NA	NA	NA	NA	0.00008967	NA	NA	
PCB 37	mg/kg				NA	NA	NA	NA	NA	NA	0.00224032	NA	NA	
PCB 38	mg/kg				NA	NA	NA	NA	NA	NA	0.00008942	NA	NA	
PCB 39	mg/kg				NA	NA	NA	NA	NA	NA	0.00031202	NA	NA	
PCB 4	mg/kg				NA	NA	NA	NA	NA	NA	0.00002857 J	NA	NA	
PCB 41+71+40	mg/kg				NA	NA	NA	NA	NA	NA	0.00922409	NA	NA	
PCB 44+47+65	mg/kg				NA	NA	NA	NA	NA	NA	0.0129296	NA	NA	
PCB 45+51	mg/kg				NA	NA	NA	NA	NA	NA	0.00226054	NA	NA	
PCB 46	mg/kg				NA	NA	NA	NA	NA	NA	0.00069648	NA	NA	
PCB 48	mg/kg				NA	NA	NA	NA	NA	NA	< 0.000017869	NA	NA	
PCB 49+69	mg/kg				NA	NA	NA	NA	NA	NA	0.00594491	NA	NA	
PCB 5+8	mg/kg				NA	NA	NA	NA	NA	NA	0.00003113	NA	NA	

Table 1 Summary of Surface Soil (0-3 feet bgs) Results

					Location ID S46a	S-46a S46a-SO0203 10/1/2003 SO N	S-47a S47a-SO0205 10/1/2003 SO N	S-48a S48a-SO0208 10/1/2003 SO N	S-49a S49a-SO0200 10/1/2003 SO N	S-5 SO02-026 10/22/2002 SO N	S-55a S-55a-0805 8/30/2005 SO N	S-57a S-57a-0905 9/1/2005 SO N	S-59a S-59a-0905 9/1/2005 SO N	S-6 SO02-030 10/22/200 SO N
Chemical Name	Unit	PHSL (toxicity)	PHSL (bio- accumulation)	Action Level Unit										
PCB 50+53	mg/kg				NA	NA	NA	NA	NA	NA	0.00182632	NA	NA	
PCB 52+43+73	mg/kg				NA	NA	NA	NA	NA	NA	0.01079664	NA	NA	
PCB 54	mg/kg				NA	NA	NA	NA	NA	NA	0.00001928	NA	NA	
PCB 56+60	mg/kg				NA	NA	NA	NA	NA	NA	0.0064797	NA	NA	
PCB 57	mg/kg				NA	NA	NA	NA	NA	NA	< 0.000044672	NA	NA	
PCB 58+67	mg/kg				NA	NA	NA	NA	NA	NA	0.0000625	NA	NA	
PCB 59+62+42+75	mg/kg				NA	NA	NA	NA	NA	NA	0.0018719	NA	NA	
PCB 6	mg/kg				NA	NA	NA	NA	NA	NA	0.00001048	NA	NA	
PCB 63	mg/kg				NA	NA	NA	NA	NA	NA	0.00015014	NA	NA	
PCB 64	mg/kg				NA	NA	NA	NA	NA	NA	0.00611089	NA	NA	
PCB 66+55	mg/kg				NA	NA	NA	NA	NA	NA	0.01084555	NA	NA	
PCB 68	mg/kg				NA	NA	NA	NA	NA	NA	< 0.000044672	NA	NA	
PCB 7	mg/kg				NA	NA	NA	NA	NA	NA	0.00000316	NA	NA	
PCB 70+61+74+76	mg/kg				NA	NA	NA	NA	NA	NA	0.01142442	NA	NA	
PCB 72	mg/kg				NA	NA	NA	NA	NA	NA	< 0.000044672	NA	NA	
PCB 77	mg/kg	.000052	mg/kg	NA	NA	NA	NA	NA	NA	NA	0.00076361	NA	NA	
PCB 78	mg/kg				NA	NA	NA	NA	NA	NA	< 0.000044672	NA	NA	
PCB 79	mg/kg				NA	NA	NA	NA	NA	NA	< 0.000044672	NA	NA	
PCB 80	mg/kg				NA	NA	NA	NA	NA	NA	< 0.000044672	NA	NA	
PCB 81	mg/kg	.000017	mg/kg	NA	NA	NA	NA	NA	NA	NA	< 0.000044672	NA	NA	
PCB 82	mg/kg				NA	NA	NA	NA	NA	NA	0.00182534	NA	NA	
PCB 83+99+112	mg/kg				NA	NA	NA	NA	NA	NA	0.00281141	NA	NA	
PCB 84	mg/kg				NA	NA	NA	NA	NA	NA	0.00233574	NA	NA	
PCB 85+116+117	mg/kg				NA	NA	NA	NA	NA	NA	0.00317928	NA	NA	
PCB 86+87+97+108+119+125	mg/kg				NA	NA	NA	NA	NA	NA	0.00247012	NA	NA	
PCB 88+91	mg/kg				NA	NA	NA	NA	NA	NA	0.00191591	NA	NA	
PCB 89	mg/kg				NA	NA	NA	NA	NA	NA	0.00016535	NA	NA	
PCB 9	mg/kg				NA	NA	NA	NA	NA	NA	0.00000448	NA	NA	
PCB 90+101+113	mg/kg				NA	NA	NA	NA	NA	NA	0.00385013	NA	NA	
PCB 92	mg/kg				NA	NA	NA	NA	NA	NA	0.0008711	NA	NA	
PCB 93+100+98+102	mg/kg				NA	NA	NA	NA	NA	NA	0.00053883	NA	NA	
PCB 94	mg/kg				NA	NA	NA	NA	NA	NA	0.00007283	NA	NA	
PCB 95	mg/kg				NA	NA	NA	NA	NA	NA	0.00862902	NA	NA	
PCB 96	mg/kg				NA	NA	NA	NA	NA	NA	0.00014192	NA	NA	
Total PCB Congeners (Calculated)	mg/kg				NA	NA	NA	NA	NA	NA	0.15527014	NA	NA	

Table 1 Summary of Surface Soil (0-3 feet bgs) Results

					Location ID S46a	S-46a S46a-SO0203 10/1/2003 SO N	S-47a S47a-SO0205 10/1/2003 SO N	S-48a S48a-SO0208 10/1/2003 SO N	S-49a S49a-SO0200 10/1/2003 SO N	S-5 SO02-026 10/22/2002 SO N	S-55a S-55a-0805 8/30/2005 SO N	S-57a S-57a-0905 9/1/2005 SO N	S-59a S-59a-0905 9/1/2005 SO N	S-6 SO02-030 10/22/200 SO N
Chemical Name	Unit	PHSL (toxicity)	PHSL (bio- accumulation)	Action Level Unit										
PCBs														
Aroclor 1016	mg/kg	.53		mg/kg	< 0.011	< 0.091	< 0.011	< 0.0098	< 0.043	< 0.01	< 0.01	< 0.01	< 0.042	
Aroclor 1221	mg/kg				< 0.021	< 0.19	< 0.021	< 0.02	< 0.0076	< 0.02	< 0.02	< 0.02	< 0.0074	
Aroclor 1232	mg/kg				< 0.011	< 0.091	< 0.011	< 0.0098	< 0.018	< 0.01	< 0.01	< 0.01	< 0.017	
Aroclor 1242	mg/kg				< 0.011	< 0.091	< 0.011	< 0.0098	< 0.0066	< 0.01	< 0.01	< 0.01	< 0.0065	
Aroclor 1248	mg/kg	1.5		mg/kg	< 0.011	1.1	< 0.011	< 0.0098	< 0.0046	< 0.01	0.12	< 0.01	< 0.0045	
Aroclor 1254	mg/kg	.3		mg/kg	< 0.011	< 0.7	< 0.011	< 0.0098	< 0.0088	0.011 J	< 0.042	< 0.01	0.095	
Aroclor 1260	mg/kg	.2		mg/kg	< 0.011	0.16	< 0.011	< 0.0098	0.065 J	< 0.01	< 0.013	0.099	< 0.0049	
Total PCB (Calculated) 1	mg/kg	.676	.00039	mg/kg	< 0.021	1.26	< 0.021	< 0.02	0.065	0.011	0.12	0.099	0.095	
PAHs														
2-Methylnaphthalene	mg/kg	.2		mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Acenaphthene	mg/kg	.3		mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Acenaphthylene	mg/kg	.2		mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Anthracene	mg/kg	.845		mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Benzo(a)anthracene	mg/kg	1.05		mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Benzo(a)pyrene	mg/kg	1.45		mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Benzo(b)fluoranthene	mg/kg				NA	NA	NA	NA	NA	NA	NA	NA	NA	
Benzo(g,h,i)perylene	mg/kg	.3		mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Benzo(k)fluoranthene	mg/kg	13		mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Chrysene	mg/kg	1.29		mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Dibenz(a,h)anthracene	mg/kg	1.3		mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Dibenzofuran	mg/kg				NA	NA	NA	NA	NA	NA	NA	NA	NA	
Fluoranthene	mg/kg	2.23	37	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Fluorene	mg/kg	.536		mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Indeno(1,2,3-cd)pyrene	mg/kg	.1		mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Naphthalene	mg/kg	.561		mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Phenanthrene	mg/kg	1.17		mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Pyrene	mg/kg	1.52	1.9	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Grainsize														
Clay	PERCENT				NA	NA	NA	NA	NA	7.54	3.16	1.73	NA	
Gravel, Fine	PERCENT				NA	NA	NA	NA	NA	2.61	5.33	3.37	NA	
Gravel, Medium	PERCENT				NA	NA	NA	NA	NA	10.0	8.57	32.9	NA	
Sand, Coarse	PERCENT				NA	NA	NA	NA	NA	10.6	14.7	10.9	NA	
Sand, Fine	PERCENT				NA	NA	NA	NA	NA	14.8	16.4	12.2	NA	
Sand, Medium	PERCENT				NA	NA	NA	NA	NA	20.7	28.4	20.5	NA	
Sand, Very Coarse	PERCENT				NA	NA	NA	NA	NA	2.8	2.44	2.98	NA	
Sand, Very Fine	PERCENT				NA	NA	NA	NA	NA	3.15	2.42	2.90	NA	
Silt	PERCENT				NA	NA	NA	NA	NA	26.7	17.0	11.5	NA	

Table 1 Summary of Surface Soil (0-3 feet bgs) Results

					Location ID Sample ID Sample Date Sample Matrix Sample Type	S-46a S46a-SO0203 10/1/2003 SO N	S-47a S47a-SO0205 10/1/2003 SO N	S-48a S48a-SO0208 10/1/2003 SO N	S-49a S49a-SO0200 10/1/2003 SO N	S-5 SO02-026 10/22/2002 SO N	S-55a S-55a-0805 8/30/2005 SO N	S-57a S-57a-0905 9/1/2005 SO N	S-59a S-59a-0905 9/1/2005 SO N	S-6 SO02-030 10/22/200 SO N
Chemical Name	Unit	PHSL (toxicity)	PHSL (bio- accumulation)	Action Level Unit										
NWTPH-Dx														
Diesel Range B	mg/kg				NA	NA	NA	NA	NA	28 JN	NA	NA	NA	
Residual Range C	mg/kg				NA	NA	NA	NA	NA	200 JN	NA	NA	NA	
Diesel Range Hydrocarbons	mg/Kg				NA	NA	NA	NA	NA	NA	NA	NA	NA	
Residual Range Organics (RRO)	mg/Kg				NA	NA	NA	NA	NA	NA	NA	NA	NA	

Bold and Shaded

Detected result exceeds Upland Soil/Stormwater Sediment Scr

Bold and Inverted

Detected result exceeds Upland Soil/Stormwater Sediment Scr

Bold and Highlighted

Detected result exceeds both Upland Soil/Stormwater Sedimer

Bold and Blue

Detection Limit for ND exceeds one or both screening levels.

bgs - below ground surface

PHSL - Portland Harbor Screening Level

Total PCBs equal to sum of detected PCB aroclor values or the highest method reporting limit if all PCE

Table 1 Summary of Surface Soil (0-3 feet bgs) Results

					Location ID 1
					Sample ID 1
					Sample Date 12
					Sample Matrix Soil
					Sample Type Soil
Chemical Name	Unit	PHSL (toxicity)	PHSL (bio- accumulation)	Action Level Unit	
Conventionals					
Solids, Total	%				
Total Solids	%				
Carbon, Total Organic (TOC)	%				
Metals					
Chromium	mg/Kg	111		mg/kg	
Manganese	mg/Kg	1100		mg/kg	
Arsenic	mg/Kg	33	7	mg/kg	
Cadmium	mg/Kg	4.98	1	mg/kg	
Copper	mg/Kg	149		mg/kg	
Lead	mg/Kg	128	17	mg/kg	
Zinc	mg/Kg	459		mg/kg	
PCB Congeners					
PCB 1	mg/kg				
PCB 10	mg/kg				
PCB 103	mg/kg				
PCB 104	mg/kg				
PCB 105	mg/kg		.00017	mg/kg	
PCB 107+124	mg/kg				
PCB 109+106+123	mg/kg		.00021	mg/kg	
PCB 11	mg/kg				
PCB 110+115	mg/kg				
PCB 111	mg/kg				
PCB 118	mg/kg		.00012	mg/kg	
PCB 12+13	mg/kg				
PCB 120	mg/kg				
PCB 121	mg/kg				
PCB 122+114	mg/kg		.00017	mg/kg	
PCB 126	mg/kg		.00000005	mg/kg	
PCB 127	mg/kg				
PCB 128+166	mg/kg				
PCB 129+138+160+163	mg/kg				
PCB 130+137+164	mg/kg				
PCB 131+142	mg/kg				
PCB 132	mg/kg				
PCB 133	mg/kg				
PCB 135+151+154	mg/kg				
PCB 136	mg/kg				

Table 1 Summary of Surface Soil (0-3 feet bgs) Results

Location ID Sample ID 1 Sample Date 12 Sample Matrix Sample Type				
Chemical Name	Unit	PHSL (toxicity)	PHSL (bio- accumulation)	Action Level Unit
PCB 139+140	mg/kg			
PCB 14	mg/kg			
PCB 143	mg/kg			
PCB 144	mg/kg			
PCB 145	mg/kg			
PCB 146+161	mg/kg			
PCB 147+134+149	mg/kg			
PCB 148	mg/kg			
PCB 15	mg/kg			
PCB 152+150	mg/kg			
PCB 153+168+141	mg/kg			
PCB 155	mg/kg			
PCB 156+157	mg/kg	.00021	mg/kg	
PCB 158	mg/kg			
PCB 159	mg/kg			
PCB 162	mg/kg			
PCB 163	mg/kg			
PCB 165	mg/kg			
PCB 167	mg/kg	.00021	mg/kg	
PCB 169	mg/kg	.00000021	mg/kg	
PCB 17	mg/kg			
PCB 170	mg/kg			
PCB 172	mg/kg			
PCB 175	mg/kg			
PCB 176	mg/kg			
PCB 178	mg/kg			
PCB 179	mg/kg			
PCB 18+30	mg/kg			
PCB 180+193	mg/kg			
PCB 181+171+173	mg/kg			
PCB 183+174+185	mg/kg			
PCB 184	mg/kg			
PCB 186	mg/kg			
PCB 187+182	mg/kg			
PCB 188	mg/kg			
PCB 189	mg/kg	.0012	mg/kg	
PCB 19	mg/kg			
PCB 190	mg/kg			

Table 1 Summary of Surface Soil (0-3 feet bgs) Results

Location ID Sample ID 1 Sample Date 12 Sample Matrix Sample Type				
Chemical Name	Unit	PHSL (toxicity)	PHSL (bio- accumulation)	Action Level Unit
PCB 191	mg/kg			
PCB 192	mg/kg			
PCB 194	mg/kg			
PCB 195	mg/kg			
PCB 196+203	mg/kg			
PCB 197+200	mg/kg			
PCB 198+199	mg/kg			
PCB 2	mg/kg			
PCB 20+21+28+33	mg/kg			
PCB 201	mg/kg			
PCB 202	mg/kg			
PCB 204	mg/kg			
PCB 205	mg/kg			
PCB 206	mg/kg			
PCB 207	mg/kg			
PCB 208	mg/kg			
PCB 209	mg/kg			
PCB 22	mg/kg			
PCB 25	mg/kg			
PCB 26+29	mg/kg			
PCB 27+16+24	mg/kg			
PCB 3	mg/kg			
PCB 31	mg/kg			
PCB 32	mg/kg			
PCB 34+23	mg/kg			
PCB 35	mg/kg			
PCB 36	mg/kg			
PCB 37	mg/kg			
PCB 38	mg/kg			
PCB 39	mg/kg			
PCB 4	mg/kg			
PCB 41+71+40	mg/kg			
PCB 44+47+65	mg/kg			
PCB 45+51	mg/kg			
PCB 46	mg/kg			
PCB 48	mg/kg			
PCB 49+69	mg/kg			
PCB 5+8	mg/kg			

Table 1 Summary of Surface Soil (0-3 feet bgs) Results

Location ID Sample ID 1 Sample Date 12 Sample Matrix Sample Type				
Chemical Name	Unit	PHSL (toxicity)	PHSL (bio- accumulation)	Action Level Unit
PCB 50+53	mg/kg			
PCB 52+43+73	mg/kg			
PCB 54	mg/kg			
PCB 56+60	mg/kg			
PCB 57	mg/kg			
PCB 58+67	mg/kg			
PCB 59+62+42+75	mg/kg			
PCB 6	mg/kg			
PCB 63	mg/kg			
PCB 64	mg/kg			
PCB 66+55	mg/kg			
PCB 68	mg/kg			
PCB 7	mg/kg			
PCB 70+61+74+76	mg/kg			
PCB 72	mg/kg			
PCB 77	mg/kg	.000052	mg/kg	
PCB 78	mg/kg			
PCB 79	mg/kg			
PCB 80	mg/kg			
PCB 81	mg/kg	.000017	mg/kg	
PCB 82	mg/kg			
PCB 83+99+112	mg/kg			
PCB 84	mg/kg			
PCB 85+116+117	mg/kg			
PCB 86+87+97+108+119+125	mg/kg			
PCB 88+91	mg/kg			
PCB 89	mg/kg			
PCB 9	mg/kg			
PCB 90+101+113	mg/kg			
PCB 92	mg/kg			
PCB 93+100+98+102	mg/kg			
PCB 94	mg/kg			
PCB 95	mg/kg			
PCB 96	mg/kg			
Total PCB Congeners (Calculated)	mg/kg			

Table 1 Summary of Surface Soil (0-3 feet bgs) Results

					Location ID 1
					Sample ID 1
					Sample Date 12
					Sample Matrix
					Sample Type
Chemical Name	Unit	PHSL (toxicity)	PHSL (bio- accumulation)	Action Level Unit	
PCBs					
Aroclor 1016	mg/kg	.53		mg/kg	
Aroclor 1221	mg/kg				
Aroclor 1232	mg/kg				
Aroclor 1242	mg/kg				
Aroclor 1248	mg/kg	1.5		mg/kg	
Aroclor 1254	mg/kg	.3		mg/kg	J
Aroclor 1260	mg/kg	.2		mg/kg	
Total PCB (Calculated) 1	mg/kg	.676	.00039	mg/kg	
PAHs					
2-Methylnaphthalene	mg/kg	.2		mg/kg	
Acenaphthene	mg/kg	.3		mg/kg	
Acenaphthylene	mg/kg	.2		mg/kg	
Anthracene	mg/kg	.845		mg/kg	
Benzo(a)anthracene	mg/kg	1.05		mg/kg	
Benzo(a)pyrene	mg/kg	1.45		mg/kg	
Benzo(b)fluoranthene	mg/kg				
Benzo(g,h,i)perylene	mg/kg	.3		mg/kg	
Benzo(k)fluoranthene	mg/kg	13		mg/kg	
Chrysene	mg/kg	1.29		mg/kg	
Dibenz(a,h)anthracene	mg/kg	1.3		mg/kg	
Dibenzofuran	mg/kg				
Fluoranthene	mg/kg	2.23	37	mg/kg	
Fluorene	mg/kg	.536		mg/kg	
Indeno(1,2,3-cd)pyrene	mg/kg	.1		mg/kg	
Naphthalene	mg/kg	.561		mg/kg	
Phenanthrene	mg/kg	1.17		mg/kg	
Pyrene	mg/kg	1.52	1.9	mg/kg	
Grainsize					
Clay	PERCENT				
Gravel, Fine	PERCENT				
Gravel, Medium	PERCENT				
Sand, Coarse	PERCENT				
Sand, Fine	PERCENT				
Sand, Medium	PERCENT				
Sand, Very Coarse	PERCENT				
Sand, Very Fine	PERCENT				
Silt	PERCENT				

Table 1 Summary of Surface Soil (0-3 feet bgs) Results

					Location ID Sample ID 1
					Sample Date 12
					Sample Matrix
					Sample Type
Chemical Name	Unit	PHSL (toxicity)	PHSL (bio- accumulation)	Action Level Unit	
NWTPH-Dx					
Diesel Range B	mg/kg				JN
Residual Range C	mg/kg				JN
Diesel Range Hydrocarbons	mg/Kg				
Residual Range Organics (RRO)	mg/Kg				

Bold and Shaded	Detected result exceeds Upland Soil/Stormwater Sediment Scr
Bold and Inverted	Detected result exceeds Upland Soil/Stormwater Sediment Scr
Bold and Highlighted	Detected result exceeds both Upland Soil/Stormwater Sedimer
Bold and Blue	Detection Limit for ND exceeds one or both screening levels.

bgs - below ground surface

PHSL - Portland Harbor Screening Level

Total PCBs equal to sum of detected PCB aroclor values or the highest method reporting limit if all PCE

Table 1 Summary of Surface Soil (0-3 feet bgs) Results

					Location ID S-7 SO02-025 10/22/2002 SO N	S-8A SO02-031 10/21/2002 SO N	S-8B SO02-032 10/21/2002 SO N	TP19 TP19-2.25-2.5-0605 6/10/2005 SO N	TP20 TP-20-2.75-3 2/1/2006 SO N	TP21 TP-21-2-2.25 2/1/2006 SO N	Samples	Detects	Non-Detects
Chemical Name	Unit	PHSL (toxicity)	PHSL (bio- accumulation)	Action Level Unit									
Conventionals													
Solids, Total	%				NA	NA	NA	90.3	94.1	92.5	7	7	0
Total Solids	%				94	90	91	NA	NA	NA	42	42	0
Carbon, Total Organic (TOC)	%				NA	NA	NA	NA	NA	NA	3	3	0
Metals													
Chromium	mg/Kg	111		mg/kg	NA	NA	NA	NA	NA	NA	4	4	0
Manganese	mg/Kg	1100		mg/kg	NA	NA	NA	NA	NA	NA	4	4	0
Arsenic	mg/Kg	33	7	mg/kg	NA	NA	NA	NA	NA	NA	4	4	0
Cadmium	mg/Kg	4.98	1	mg/kg	NA	NA	NA	NA	NA	NA	4	2	2
Copper	mg/Kg	149		mg/kg	NA	NA	NA	NA	NA	NA	4	4	0
Lead	mg/Kg	128	17	mg/kg	NA	NA	NA	NA	NA	NA	4	4	0
Zinc	mg/Kg	459		mg/kg	NA	NA	NA	NA	NA	NA	4	4	0
PCB Congeners													
PCB 1	mg/kg				NA	NA	NA	NA	NA	NA	2	2	0
PCB 10	mg/kg				NA	NA	NA	NA	NA	NA	2	1	1
PCB 103	mg/kg				NA	NA	NA	NA	NA	NA	2	2	0
PCB 104	mg/kg				NA	NA	NA	NA	NA	NA	2	0	2
PCB 105	mg/kg	.00017		mg/kg	NA	NA	NA	NA	NA	NA	2	2	0
PCB 107+124	mg/kg				NA	NA	NA	NA	NA	NA	2	1	1
PCB 109+106+123	mg/kg	.00021		mg/kg	NA	NA	NA	NA	NA	NA	2	2	0
PCB 11	mg/kg				NA	NA	NA	NA	NA	NA	2	2	0
PCB 110+115	mg/kg				NA	NA	NA	NA	NA	NA	2	2	0
PCB 111	mg/kg				NA	NA	NA	NA	NA	NA	2	0	2
PCB 118	mg/kg	.00012		mg/kg	NA	NA	NA	NA	NA	NA	2	2	0
PCB 12+13	mg/kg				NA	NA	NA	NA	NA	NA	2	1	1
PCB 120	mg/kg				NA	NA	NA	NA	NA	NA	2	0	2
PCB 121	mg/kg				NA	NA	NA	NA	NA	NA	2	0	2
PCB 122+114	mg/kg	.00017		mg/kg	NA	NA	NA	NA	NA	NA	2	2	0
PCB 126	mg/kg	.00000005		mg/kg	NA	NA	NA	NA	NA	NA	2	2	0
PCB 127	mg/kg				NA	NA	NA	NA	NA	NA	2	0	2
PCB 128+166	mg/kg				NA	NA	NA	NA	NA	NA	2	2	0
PCB 129+138+160+163	mg/kg				NA	NA	NA	NA	NA	NA	2	2	0
PCB 130+137+164	mg/kg				NA	NA	NA	NA	NA	NA	2	2	0
PCB 131+142	mg/kg				NA	NA	NA	NA	NA	NA	2	2	0
PCB 132	mg/kg				NA	NA	NA	NA	NA	NA	2	2	0
PCB 133	mg/kg				NA	NA	NA	NA	NA	NA	2	2	0
PCB 135+151+154	mg/kg				NA	NA	NA	NA	NA	NA	2	2	0
PCB 136	mg/kg				NA	NA	NA	NA	NA	NA	2	2	0

Table 1 Summary of Surface Soil (0-3 feet bgs) Results

					Location ID S-7 SO02-025 10/22/2002 SO N	S-8A SO02-031 10/21/2002 SO N	S-8B SO02-032 10/21/2002 SO N	TP19 TP19-2.25-2.5-0605 6/10/2005 SO N	TP20 TP-20-2.75-3 2/1/2006 SO N	TP21 TP-21-2-2.25 2/1/2006 SO N	Samples	Detects	Non-Detects	
Chemical Name	Unit	PHSL (toxicity)	PHSL (bio- accumulation)	Action Level Unit										
PCB 139+140	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 14	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	0	2
PCB 143	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 144	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 145	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	0	2
PCB 146+161	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 147+134+149	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 148	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 15	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 152+150	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 153+168+141	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 155	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	0	2
PCB 156+157	mg/kg	.00021	mg/kg		NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 158	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 159	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 162	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 163	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 165	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	0	2
PCB 167	mg/kg	.00021	mg/kg		NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 169	mg/kg	.00000021	mg/kg		NA	NA	NA	NA	NA	NA	NA	2	0	2
PCB 17	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 170	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 172	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 175	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	0	2
PCB 176	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 178	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 179	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 18+30	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 180+193	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 181+171+173	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 183+174+185	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 184	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	0	2
PCB 186	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	0	2
PCB 187+182	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 188	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	0	2
PCB 189	mg/kg	.0012	mg/kg		NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 19	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 190	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	2	0

Table 1 Summary of Surface Soil (0-3 feet bgs) Results

					Location ID Sample ID Sample Date Sample Matrix Sample Type	S-7 SO02-025 10/22/2002 SO N	S-8A SO02-031 10/21/2002 SO N	S-8B SO02-032 10/21/2002 SO N	TP19 TP19-2.25-2.5-0605 6/10/2005 SO N	TP20 TP-20-2.75-3 2/1/2006 SO N	TP21 TP-21-2-2.25 2/1/2006 SO N	Samples	Detects	Non-Detects	
Chemical Name	Unit	PHSL (toxicity)	PHSL (bio- accumulation)	Action Level Unit											
PCB 191	mg/kg				NA	NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 192	mg/kg				NA	NA	NA	NA	NA	NA	NA	NA	2	0	2
PCB 194	mg/kg				NA	NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 195	mg/kg				NA	NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 196+203	mg/kg				NA	NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 197+200	mg/kg				NA	NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 198+199	mg/kg				NA	NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 2	mg/kg				NA	NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 20+21+28+33	mg/kg				NA	NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 201	mg/kg				NA	NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 202	mg/kg				NA	NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 204	mg/kg				NA	NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 205	mg/kg				NA	NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 206	mg/kg				NA	NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 207	mg/kg				NA	NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 208	mg/kg				NA	NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 209	mg/kg				NA	NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 22	mg/kg				NA	NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 25	mg/kg				NA	NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 26+29	mg/kg				NA	NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 27+16+24	mg/kg				NA	NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 3	mg/kg				NA	NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 31	mg/kg				NA	NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 32	mg/kg				NA	NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 34+23	mg/kg				NA	NA	NA	NA	NA	NA	NA	NA	2	0	2
PCB 35	mg/kg				NA	NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 36	mg/kg				NA	NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 37	mg/kg				NA	NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 38	mg/kg				NA	NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 39	mg/kg				NA	NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 4	mg/kg				NA	NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 41+71+40	mg/kg				NA	NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 44+47+65	mg/kg				NA	NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 45+51	mg/kg				NA	NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 46	mg/kg				NA	NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 48	mg/kg				NA	NA	NA	NA	NA	NA	NA	NA	2	1	1
PCB 49+69	mg/kg				NA	NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 5+8	mg/kg				NA	NA	NA	NA	NA	NA	NA	NA	2	2	0

Table 1 Summary of Surface Soil (0-3 feet bgs) Results

Location ID Sample ID Sample Date Sample Matrix Sample Type					S-7 SO02-025 10/22/2002 SO N	S-8A SO02-031 10/21/2002 SO N	S-8B SO02-032 10/21/2002 SO N	TP19 TP19-2.25-2.5-0605 6/10/2005 SO N	TP20 TP-20-2.75-3 2/1/2006 SO N	TP21 TP-21-2-2.25 2/1/2006 SO N	Samples	Detects	Non-Detects	
Chemical Name	Unit	PHSL (toxicity)	PHSL (bio- accumulation)	Action Level Unit										
PCB 50+53	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 52+43+73	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 54	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 56+60	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 57	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	0	2
PCB 58+67	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	1	1
PCB 59+62+42+75	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 6	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 63	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 64	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 66+55	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 68	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	0	2
PCB 7	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 70+61+74+76	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 72	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	0	2
PCB 77	mg/kg	.000052	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 78	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	0	2
PCB 79	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	0	2
PCB 80	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	1	1
PCB 81	mg/kg	.000017	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	2	0	2
PCB 82	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 83+99+112	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 84	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 85+116+117	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 86+87+97+108+119+125	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 88+91	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 89	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 9	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	1	1
PCB 90+101+113	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 92	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 93+100+98+102	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 94	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 95	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	2	0
PCB 96	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	2	0
Total PCB Congeners (Calculated)	mg/kg				NA	NA	NA	NA	NA	NA	NA	2	2	0

Table 1 Summary of Surface Soil (0-3 feet bgs) Results

					Location ID Sample ID Sample Date Sample Matrix Sample Type	S-7 SO02-025 10/22/2002 SO N	S-8A SO02-031 10/21/2002 SO N	S-8B SO02-032 10/21/2002 SO N	TP19 TP19-2.25-2.5-0605 6/10/2005 SO N	TP20 TP-20-2.75-3 2/1/2006 SO N	TP21 TP-21-2-2.25 2/1/2006 SO N	Samples	Detects	Non-Detects
Chemical Name	Unit	PHSL (toxicity)	PHSL (bio- accumulation)	Action Level Unit										
PCBs														
Aroclor 1016	mg/kg	.53		mg/kg	< 0.043	< 0.045	< 0.044	NA	< 0.054	< 0.055	48	0	48	
Aroclor 1221	mg/kg				< 0.0075	< 0.0079	< 0.0077	NA	< 0.11	< 0.11	48	0	48	
Aroclor 1232	mg/kg				< 0.017	< 0.018	< 0.018	NA	< 0.054	< 0.055	48	0	48	
Aroclor 1242	mg/kg				< 0.0065	< 0.0069	< 0.0068	NA	< 0.054	< 0.055	48	0	48	
Aroclor 1248	mg/kg	1.5		mg/kg	< 0.0045	< 0.0047	< 0.0047	NA	< 0.054	0.40	48	21	27	
Aroclor 1254	mg/kg	.3		mg/kg	0.029	J	< 0.0092	< 0.0091	NA	0.15	0.72	48	14	34
Aroclor 1260	mg/kg	.2		mg/kg	< 0.0049	1.4	0.78	NA	0.13	0.3	48	23	25	
Total PCB (Calculated) 1	mg/kg	.676	.00039	mg/kg	0.029	1.4	0.78	NA	0.28	1.42	48	41	7	
PAHs														
2-Methylnaphthalene	mg/kg	.2		mg/kg	NA	NA	NA	NA	NA	NA	5	2	3	
Acenaphthene	mg/kg	.3		mg/kg	NA	NA	NA	NA	NA	NA	5	2	3	
Acenaphthylene	mg/kg	.2		mg/kg	NA	NA	NA	NA	NA	NA	5	1	4	
Anthracene	mg/kg	.845		mg/kg	NA	NA	NA	NA	NA	NA	5	1	4	
Benzo(a)anthracene	mg/kg	1.05		mg/kg	NA	NA	NA	NA	NA	NA	5	3	2	
Benzo(a)pyrene	mg/kg	1.45		mg/kg	NA	NA	NA	NA	NA	NA	5	2	3	
Benzo(b)fluoranthene	mg/kg				NA	NA	NA	NA	NA	NA	5	3	2	
Benzo(g,h,i)perylene	mg/kg	.3		mg/kg	NA	NA	NA	NA	NA	NA	1	1	0	
Benzo(k)fluoranthene	mg/kg	13		mg/kg	NA	NA	NA	NA	NA	NA	5	2	3	
Chrysene	mg/kg	1.29		mg/kg	NA	NA	NA	NA	NA	NA	5	3	2	
Dibenz(a,h)anthracene	mg/kg	1.3		mg/kg	NA	NA	NA	NA	NA	NA	5	1	4	
Dibenzofuran	mg/kg				NA	NA	NA	NA	NA	NA	1	1	0	
Fluoranthene	mg/kg	2.23	37	mg/kg	NA	NA	NA	NA	NA	NA	5	5	0	
Fluorene	mg/kg	.536		mg/kg	NA	NA	NA	NA	NA	NA	5	1	4	
Indeno(1,2,3-cd)pyrene	mg/kg	.1		mg/kg	NA	NA	NA	NA	NA	NA	5	2	3	
Naphthalene	mg/kg	.561		mg/kg	NA	NA	NA	NA	NA	NA	5	2	3	
Phenanthrene	mg/kg	1.17		mg/kg	NA	NA	NA	NA	NA	NA	5	3	2	
Pyrene	mg/kg	1.52	1.9	mg/kg	NA	NA	NA	NA	NA	NA	5	3	2	
Grainsize														
Clay	PERCENT				NA	NA	NA	NA	NA	NA	3	3	0	
Gravel, Fine	PERCENT				NA	NA	NA	NA	NA	NA	3	3	0	
Gravel, Medium	PERCENT				NA	NA	NA	NA	NA	NA	3	3	0	
Sand, Coarse	PERCENT				NA	NA	NA	NA	NA	NA	3	3	0	
Sand, Fine	PERCENT				NA	NA	NA	NA	NA	NA	3	3	0	
Sand, Medium	PERCENT				NA	NA	NA	NA	NA	NA	3	3	0	
Sand, Very Coarse	PERCENT				NA	NA	NA	NA	NA	NA	3	3	0	
Sand, Very Fine	PERCENT				NA	NA	NA	NA	NA	NA	3	3	0	
Silt	PERCENT				NA	NA	NA	NA	NA	NA	3	3	0	

Table 1 Summary of Surface Soil (0-3 feet bgs) Results

					Location ID Sample ID Sample Date Sample Matrix Sample Type	S-7 SO02-025 10/22/2002 SO N	S-8A SO02-031 10/21/2002 SO N	S-8B SO02-032 10/21/2002 SO N	TP19 TP19-2.25-2.5-0605 6/10/2005 SO N	TP20 TP-20-2.75-3 2/1/2006 SO N	TP21 TP-21-2-2.25 2/1/2006 SO N	Samples	Detects	Non-Detects
Chemical Name	Unit	PHSL (toxicity)	PHSL (bio- accumulation)	Action Level Unit										
NWTPH-Dx														
Diesel Range B	mg/kg				5.7 JN	53 JN	150 JN	NA	NA	NA	NA	17	17	0
Residual Range C	mg/kg				53 JN	270 JN	160 JN	NA	NA	NA	NA	17	17	0
Diesel Range Hydrocarbons	mg/Kg				NA	NA	NA	430 NJ	NA	NA	NA	1	1	0
Residual Range Organics (RRO)	mg/Kg				NA	NA	NA	1,200 NJ	NA	NA	NA	1	1	0

Bold and Shaded

Detected result exceeds Upland Soil/Stormwater Sediment Scr

Bold and Inverted

Detected result exceeds Upland Soil/Stormwater Sediment Scr

Bold and Highlighted

Detected result exceeds both Upland Soil/Stormwater Sedimer

Bold and Blue

Detection Limit for ND exceeds one or both screening levels.

bgs - below ground surface

PHSL - Portland Harbor Screening Level

Total PCBs equal to sum of detected PCB aroclor values or the highest method reporting limit if all PCE

Table 1 Summary of Surface Soil (0-3 feet bgs) Results

Location ID Sample ID Sample Date Sample Matrix Sample Type							Summary Statistics		
Chemical Name	Unit	PHSL (toxicity)	PHSL (bio- accumulation)	Action Level Unit	Exceedances	DL Exceedances	Max Detected Concentration	Date/ID for Max Concentration	Min Detected Concentration
Conventionals									
Solids, Total	%				0	0	95.2	S-59a-0905	89.9
Total Solids	%				0	0	99.8	S24-S00170	83.4
Carbon, Total Organic (TOC)	%				0	0	0.76	S-59a-0905	0.34
Metals									
Chromium	mg/Kg	111		mg/kg	2	0	335	S-57a-0905	27.8
Manganese	mg/Kg	1100		mg/kg	2	0	3090	S-57a-0905	478
Arsenic	mg/Kg	33	7	mg/kg	1	0	9.49	S-57a-0905	4.48
Cadmium	mg/Kg	4.98	1	mg/kg	1	0	1.06	S-57a-0905	0.48
Copper	mg/Kg	149		mg/kg	0	0	130	S-57a-0905	18.7
Lead	mg/Kg	128	17	mg/kg	1	0	33.7	S-59a-0905	8.07
Zinc	mg/Kg	459		mg/kg	0	0	192	S-59a-0905	68
PCB Congeners									
PCB 1	mg/kg				0	0	0.00001696	B-37 1.5-2.0-0905	0.00001492
PCB 10	mg/kg				0	0	0.00004122	B-37 1.5-2.0-0905	0.00004122
PCB 103	mg/kg				0	0	0.00006153	S-57a-0905	0.00000914
PCB 104	mg/kg				0	0	-	-	-
PCB 105	mg/kg	.00017		mg/kg	2	0	0.00234484	S-57a-0905	0.00118081
PCB 107+124	mg/kg				0	0	0.0001188	B-37 1.5-2.0-0905	0.0001188
PCB 109+106+123	mg/kg	.00021		mg/kg	2	0	0.00062624	S-57a-0905	0.00021252
PCB 11	mg/kg				0	0	0.0002077	B-37 1.5-2.0-0905	0.00013154
PCB 110+115	mg/kg				0	0	0.00764264	S-57a-0905	0.00255584
PCB 111	mg/kg				0	0	-	-	-
PCB 118	mg/kg	.00012		mg/kg	2	0	0.00349541	S-57a-0905	0.00188294
PCB 12+13	mg/kg				0	0	0.0000966	B-37 1.5-2.0-0905	0.0000966
PCB 120	mg/kg				0	0	-	-	-
PCB 121	mg/kg				0	0	-	-	-
PCB 122+114	mg/kg	.00017		mg/kg	1	0	0.00024907	S-57a-0905	0.00012576
PCB 126	mg/kg	.00000005		mg/kg	2	0	0.00002402	S-57a-0905	0.00001847
PCB 127	mg/kg				0	0	-	-	-
PCB 128+166	mg/kg				0	0	0.00041121	S-57a-0905	0.00022425
PCB 129+138+160+163	mg/kg				0	0	0.00241356	S-57a-0905	0.00139403
PCB 130+137+164	mg/kg				0	0	0.00012745	S-57a-0905	0.00006967
PCB 131+142	mg/kg				0	0	0.0000416	S-57a-0905	0.00001861
PCB 132	mg/kg				0	0	0.00123069	S-57a-0905	0.00076068
PCB 133	mg/kg				0	0	0.00002921	S-57a-0905	0.0000173
PCB 135+151+154	mg/kg				0	0	0.00112707	S-57a-0905	0.00084165
PCB 136	mg/kg				0	0	0.00036035	S-57a-0905	0.00019549

Table 1 Summary of Surface Soil (0-3 feet bgs) Results

Chemical Name	Unit	PHSL (toxicity)	PHSL (bio- accumulation)	Action Level Unit	Location ID Sample ID Sample Date Sample Matrix Sample Type					Summary Statistics	
					Exceedances	DL Exceedances	Max Detected Concentration	Date/ID for Max Concentration	Min Detected Concentration		
PCB 139+140	mg/kg				0	0	0.00003884	S-57a-0905	0.00001664		
PCB 14	mg/kg				0	0	-	-	-		
PCB 143	mg/kg				0	0	0.00009046	S-57a-0905	0.00005291		
PCB 144	mg/kg				0	0	0.00017943	B-37 1.5-2.0-0905	0.00004737		
PCB 145	mg/kg				0	0	-	-	-		
PCB 146+161	mg/kg				0	0	0.0002644	S-57a-0905	0.00022588		
PCB 147+134+149	mg/kg				0	0	0.00333708	S-57a-0905	0.00230966		
PCB 148	mg/kg				0	0	0.00000268	S-57a-0905	0.00000229		
PCB 15	mg/kg				0	0	0.00037719	B-37 1.5-2.0-0905	0.00019807		
PCB 152+150	mg/kg				0	0	0.00000138	S-57a-0905	0.00000047		
PCB 153+168+141	mg/kg				0	0	0.00172963	S-57a-0905	0.00121862		
PCB 155	mg/kg				0	0	-	-	-		
PCB 156+157	mg/kg	.00021	mg/kg		0	0	0.00020784	S-57a-0905	0.00014692		
PCB 158	mg/kg				0	0	0.00018371	S-57a-0905	0.00012921		
PCB 159	mg/kg				0	0	0.00001546	S-57a-0905	0.00001504		
PCB 162	mg/kg				0	0	0.00001379	S-57a-0905	0.00001082		
PCB 163	mg/kg				0	0	0.00030245	S-57a-0905	0.00030126		
PCB 165	mg/kg				0	0	-	-	-		
PCB 167	mg/kg	.00021	mg/kg		0	0	0.0000812	S-57a-0905	0.00005734		
PCB 169	mg/kg	.00000021	mg/kg		0	2	-	-	-		
PCB 17	mg/kg				0	0	0.00048884	B-37 1.5-2.0-0905	0.00025957		
PCB 170	mg/kg				0	0	0.00044684	S-57a-0905	0.00044257		
PCB 172	mg/kg				0	0	0.00007582	B-37 1.5-2.0-0905	0.00006884		
PCB 175	mg/kg				0	0	-	-	-		
PCB 176	mg/kg				0	0	0.00009673	S-57a-0905	0.00008963		
PCB 178	mg/kg				0	0	0.00040391	S-57a-0905	0.00037755		
PCB 179	mg/kg				0	0	0.00024104	S-57a-0905	0.00022563		
PCB 18+30	mg/kg				0	0	0.00087929	B-37 1.5-2.0-0905	0.00025614		
PCB 180+193	mg/kg				0	0	0.00105276	S-57a-0905	0.00089967		
PCB 181+171+173	mg/kg				0	0	0.00017221	S-57a-0905	0.00015959		
PCB 183+174+185	mg/kg				0	0	0.00218596	S-57a-0905	0.00202329		
PCB 184	mg/kg				0	0	-	-	-		
PCB 186	mg/kg				0	0	-	-	-		
PCB 187+182	mg/kg				0	0	0.00159482	S-57a-0905	0.00134599		
PCB 188	mg/kg				0	0	-	-	-		
PCB 189	mg/kg	.0012	mg/kg		0	0	0.00001187	S-57a-0905	0.00001092		
PCB 19	mg/kg				0	0	0.00024389	B-37 1.5-2.0-0905	0.00012702		
PCB 190	mg/kg				0	0	0.00006934	S-57a-0905	0.00006353		

Table 1 Summary of Surface Soil (0-3 feet bgs) Results

Chemical Name	Unit	PHSL (toxicity)	PHSL (bio- accumulation)	Action Level Unit	Location ID Sample ID Sample Date Sample Matrix Sample Type					Summary Statistics	
					Exceedances	DL Exceedances	Max Detected Concentration	Date/ID for Max Concentration	Min Detected Concentration		
PCB 191	mg/kg				0	0	0.00001551	S-57a-0905	0.00001419		
PCB 192	mg/kg				0	0	-	-	-		
PCB 194	mg/kg				0	0	0.00022928	S-57a-0905	0.00016659		
PCB 195	mg/kg				0	0	0.00009256	S-57a-0905	0.0000868		
PCB 196+203	mg/kg				0	0	0.00074819	S-57a-0905	0.00042136		
PCB 197+200	mg/kg				0	0	0.00005626	S-57a-0905	0.00003767		
PCB 198+199	mg/kg				0	0	0.00053304	S-57a-0905	0.00027278		
PCB 2	mg/kg				0	0	0.00008299	B-37 1.5-2.0-0905	0.00000303		
PCB 20+21+28+33	mg/kg				0	0	0.00268309	B-37 1.5-2.0-0905	0.00018633		
PCB 201	mg/kg				0	0	0.00007574	S-57a-0905	0.00004812		
PCB 202	mg/kg				0	0	0.00009093	S-57a-0905	0.00004563		
PCB 204	mg/kg				0	0	0.00001293	B-37 1.5-2.0-0905	0.00001272		
PCB 205	mg/kg				0	0	0.00000972	S-57a-0905	0.00000901		
PCB 206	mg/kg				0	0	0.0003023	S-57a-0905	0.00012305		
PCB 207	mg/kg				0	0	0.00003229	S-57a-0905	0.00001225		
PCB 208	mg/kg				0	0	0.0000931	S-57a-0905	0.00003934		
PCB 209	mg/kg				0	0	0.00011911	B-37 1.5-2.0-0905	0.00010173		
PCB 22	mg/kg				0	0	0.00114491	S-57a-0905	0.00073614		
PCB 25	mg/kg				0	0	0.00074386	S-57a-0905	0.00010324		
PCB 26+29	mg/kg				0	0	0.0003694	B-37 1.5-2.0-0905	0.00011615		
PCB 27+16+24	mg/kg				0	0	0.00013158	B-37 1.5-2.0-0905	0.00008438		
PCB 3	mg/kg				0	0	0.00003692	B-37 1.5-2.0-0905	0.00000784		
PCB 31	mg/kg				0	0	0.00265748	S-57a-0905	0.00262998		
PCB 32	mg/kg				0	0	0.00100457	S-57a-0905	0.00062507		
PCB 34+23	mg/kg				0	0	-	-	-		
PCB 35	mg/kg				0	0	0.00008031	B-37 1.5-2.0-0905	0.00007266		
PCB 36	mg/kg				0	0	0.00008967	S-57a-0905	0.00003023		
PCB 37	mg/kg				0	0	0.00224032	S-57a-0905	0.00067897		
PCB 38	mg/kg				0	0	0.00008942	S-57a-0905	0.00003231		
PCB 39	mg/kg				0	0	0.00031202	S-57a-0905	0.00014232		
PCB 4	mg/kg				0	0	0.00004648	B-37 1.5-2.0-0905	0.00002857		
PCB 41+71+40	mg/kg				0	0	0.00922409	S-57a-0905	0.00345587		
PCB 44+47+65	mg/kg				0	0	0.0129296	S-57a-0905	0.00468717		
PCB 45+51	mg/kg				0	0	0.00226054	S-57a-0905	0.0010325		
PCB 46	mg/kg				0	0	0.00069648	S-57a-0905	0.00035848		
PCB 48	mg/kg				0	0	0.00109679	B-37 1.5-2.0-0905	0.00109679		
PCB 49+69	mg/kg				0	0	0.00594491	S-57a-0905	0.00188821		
PCB 5+8	mg/kg				0	0	0.00027744	B-37 1.5-2.0-0905	0.00003113		

Table 1 Summary of Surface Soil (0-3 feet bgs) Results

Chemical Name	Unit	PHSL (toxicity)	PHSL (bio- accumulation)	Action Level Unit	Location ID		Summary Statistics						
					Sample ID	Sample Date	Sample Matrix	Sample Type	Exceedances	DL Exceedances	Max Detected Concentration	Date/ID for Max Concentration	Min Detected Concentration
PCB 50+53	mg/kg								0	0	0.00182632	S-57a-0905	0.00092992
PCB 52+43+73	mg/kg								0	0	0.01079664	S-57a-0905	0.00487505
PCB 54	mg/kg								0	0	0.00001928	S-57a-0905	0.0000099
PCB 56+60	mg/kg								0	0	0.0064797	S-57a-0905	0.00227848
PCB 57	mg/kg								0	0	-	-	-
PCB 58+67	mg/kg								0	0	0.0000625	S-57a-0905	0.0000625
PCB 59+62+42+75	mg/kg								0	0	0.0018719	S-57a-0905	0.00061837
PCB 6	mg/kg								0	0	0.00006037	B-37 1.5-2.0-0905	0.00001048
PCB 63	mg/kg								0	0	0.00015014	S-57a-0905	0.00005848
PCB 64	mg/kg								0	0	0.00611089	S-57a-0905	0.0023178
PCB 66+55	mg/kg								0	0	0.01084555	S-57a-0905	0.00382073
PCB 68	mg/kg								0	0	-	-	-
PCB 7	mg/kg								0	0	0.00001249	B-37 1.5-2.0-0905	0.00000316
PCB 70+61+74+76	mg/kg								0	0	0.01142442	S-57a-0905	0.00853171
PCB 72	mg/kg								0	0	-	-	-
PCB 77	mg/kg	.000052	mg/kg		2	0			0.00076361		S-57a-0905	0.00018665	
PCB 78	mg/kg				0	0			-		-	-	-
PCB 79	mg/kg				0	0			-		-	-	-
PCB 80	mg/kg				0	0	0.00080056		B-37 1.5-2.0-0905		0.00080056		
PCB 81	mg/kg	.000017	mg/kg		0	2			-		-	-	-
PCB 82	mg/kg				0	0	0.00182534		S-57a-0905		0.00065115		
PCB 83+99+112	mg/kg				0	0	0.00281141		S-57a-0905		0.00110389		
PCB 84	mg/kg				0	0	0.00233574		S-57a-0905		0.00079043		
PCB 85+116+117	mg/kg				0	0	0.00317928		S-57a-0905		0.00118356		
PCB 86+87+97+108+119+125	mg/kg				0	0	0.00247012		S-57a-0905		0.00160529		
PCB 88+91	mg/kg				0	0	0.00191591		S-57a-0905		0.00061138		
PCB 89	mg/kg				0	0	0.00016535		S-57a-0905		0.00006889		
PCB 9	mg/kg				0	0	0.00000448		S-57a-0905		0.00000448		
PCB 90+101+113	mg/kg				0	0	0.00385013		S-57a-0905		0.00159741		
PCB 92	mg/kg				0	0	0.0008711		S-57a-0905		0.00034		
PCB 93+100+98+102	mg/kg				0	0	0.00053883		S-57a-0905		0.0001844		
PCB 94	mg/kg				0	0	0.00007283		S-57a-0905		0.00000992		
PCB 95	mg/kg				0	0	0.00862902		S-57a-0905		0.0033452		
PCB 96	mg/kg				0	0	0.00014192		S-57a-0905		0.00003864		
Total PCB Congeners (Calculated)	mg/kg				0	0	0.15527014		S-57a-0905		0.08100332		

Table 1 Summary of Surface Soil (0-3 feet bgs) Results

							Summary Statistics		
					Exceedances	DL Exceedances	Max Detected Concentration	Date/ID for Max Concentration	Min Detected Concentration
Chemical Name	Unit	PHSL (toxicity)	PHSL (bio-accumulation)	Action Level Unit					
PCBs									
Aroclor 1016	mg/kg	.53		mg/kg	0	1	-	-	-
Aroclor 1221	mg/kg				0	0	-	-	-
Aroclor 1232	mg/kg				0	0	-	-	-
Aroclor 1242	mg/kg				0	0	-	-	-
Aroclor 1248	mg/kg	1.5		mg/kg	2	0	3.6	S29-S00167	0.013
Aroclor 1254	mg/kg	.3		mg/kg	5	6	2.8	SO02-033	0.011
Aroclor 1260	mg/kg	.2		mg/kg	10	0	430	SO02-028	0.01
Total PCB (Calculated) 1	mg/kg	.676	.00039	mg/kg	41	7	430	SO02-028	0.011
PAHs									
2-Methylnaphthalene	mg/kg	.2		mg/kg	0	0	0.11	SO02-054	0.047
Acenaphthene	mg/kg	.3		mg/kg	0	0	0.074	SO02-054	0.01
Acenaphthylene	mg/kg	.2		mg/kg	0	0	0.023	B-37 1.5-2.0-0905	0.023
Anthracene	mg/kg	.845		mg/kg	0	0	0.023	B-37 1.5-2.0-0905	0.023
Benzo(a)anthracene	mg/kg	1.05		mg/kg	0	0	0.07	B-37 1.5-2.0-0905	0.021
Benzo(a)pyrene	mg/kg	1.45		mg/kg	0	0	0.15	B-37 1.5-2.0-0905	0.041
Benzo(b)fluoranthene	mg/kg				0	0	0.1	B-37 1.5-2.0-0905	0.021
Benzo(g,h,i)perylene	mg/kg	.3		mg/kg	0	0	0.2	B-37 1.5-2.0-0905	0.2
Benzo(k)fluoranthene	mg/kg	13		mg/kg	0	0	0.095	B-37 1.5-2.0-0905	0.049
Chrysene	mg/kg	1.29		mg/kg	0	0	0.11	B-37 1.5-2.0-0905	0.017
Dibenz(a,h)anthracene	mg/kg	1.3		mg/kg	0	0	0.019	B-37 1.5-2.0-0905	0.019
Dibenzofuran	mg/kg				0	0	0.0054	B-37 1.5-2.0-0905	0.0054
Fluoranthene	mg/kg	2.23	37	mg/kg	0	0	0.26	SO02-054	0.013
Fluorene	mg/kg	.536		mg/kg	0	0	0.0085	B-37 1.5-2.0-0905	0.0085
Indeno(1,2,3-cd)pyrene	mg/kg	.1		mg/kg	1	1	0.15	B-37 1.5-2.0-0905	0.056
Naphthalene	mg/kg	.561		mg/kg	0	0	0.17	SO02-054	0.097
Phenanthrene	mg/kg	1.17		mg/kg	0	0	0.23	SO02-054	0.021
Pyrene	mg/kg	1.52	1.9	mg/kg	0	0	0.14	B-37 1.5-2.0-0905	0.017
Grainsize									
Clay	PERCENT				0	0	7.54	S-55a-0805	1.73
Gravel, Fine	PERCENT				0	0	5.33	S-57a-0905	2.61
Gravel, Medium	PERCENT				0	0	32.9	S-59a-0905	8.57
Sand, Coarse	PERCENT				0	0	14.7	S-57a-0905	10.6
Sand, Fine	PERCENT				0	0	16.4	S-57a-0905	12.2
Sand, Medium	PERCENT				0	0	28.4	S-57a-0905	20.5
Sand, Very Coarse	PERCENT				0	0	2.98	S-59a-0905	2.44
Sand, Very Fine	PERCENT				0	0	3.15	S-55a-0805	2.42
Silt	PERCENT				0	0	26.7	S-55a-0805	11.5

Table 1 Summary of Surface Soil (0-3 feet bgs) Results

							Summary Statistics							
					Location ID	Sample ID	Sample Date	Sample Matrix	Sample Type	Exceedances	DL Exceedances	Max Detected Concentration	Date/ID for Max Concentration	Min Detected Concentration
Chemical Name	Unit	PHSL (toxicity)	PHSL (bio-accumulation)	Action Level Unit										
NWTPH-Dx														
Diesel Range B	mg/kg				0	0	7000		SO02-054			5.7		
Residual Range C	mg/kg				0	0	24000		SO02-054			44		
Diesel Range Hydrocarbons	mg/Kg				0	0	430		TP19-2.25-2.5-0605			430		
Residual Range Organics (RRO)	mg/Kg				0	0	1200		TP19-2.25-2.5-0605			1200		

Bold and Shaded	Detected result exceeds Upland Soil/Stormwater Sediment Scr
Bold and Inverted	Detected result exceeds Upland Soil/Stormwater Sediment Scr
Bold and Highlighted	Detected result exceeds both Upland Soil/Stormwater Sedimer
Bold and Blue	Detection Limit for ND exceeds one or both screening levels.

bgs - below ground surface

PHSL - Portland Harbor Screening Level

Total PCBs equal to sum of detected PCB aroclor values or the highest method reporting limit if all PCE

Table 1 Summary of Surface Soil (0-3 feet bgs) Results

					Location ID	Sample ID	Sample Date	Sample Matrix	Sample Type	Date/ID for Min Concentration	Average Detected Concentration	Min DL for NonDetects	Max DL for NonDetects
Chemical Name	Unit	PHSL (toxicity)	PHSL (bio-accumulation)	Action Level Unit									
Conventionals													
Solids, Total	%					S-55a-0805		92.32857143		-		-	
Total Solids	%					S48a-SO0208		95.29047619		-		-	
Carbon, Total Organic (TOC)	%					S-57a-0905		0.5133333333		-		-	
Metals													
Chromium	mg/Kg	111		mg/kg		B-37 1.5-2.0-0905		130.025		-		-	
Manganese	mg/Kg	1100		mg/kg		S-59a-0905		1336.75		-		-	
Arsenic	mg/Kg	33	7	mg/kg		S-59a-0905		6.53		-		-	
Cadmium	mg/Kg	4.98	1	mg/kg		S-59a-0905		0.77		0.238		0.263	
Copper	mg/Kg	149		mg/kg		B-37 1.5-2.0-0905		48.95		-		-	
Lead	mg/Kg	128	17	mg/kg		B-37 1.5-2.0-0905		15.255		-		-	
Zinc	mg/Kg	459		mg/kg		B-37 1.5-2.0-0905		102.425		-		-	
PCB Congeners													
PCB 1	mg/kg					S-57a-0905		0.00001594		-		-	
PCB 10	mg/kg					B-37 1.5-2.0-0905		0.00004122		0.000004467		0.000004467	
PCB 103	mg/kg					B-37 1.5-2.0-0905		0.000035335		-		-	
PCB 104	mg/kg					-		-		0.000044672		0.000050585	
PCB 105	mg/kg	.00017		mg/kg		B-37 1.5-2.0-0905		0.001762825		-		-	
PCB 107+124	mg/kg					B-37 1.5-2.0-0905		0.0001188		0.000089345		0.000089345	
PCB 109+106+123	mg/kg	.00021		mg/kg		B-37 1.5-2.0-0905		0.00041938		-		-	
PCB 11	mg/kg					S-57a-0905		0.00016962		-		-	
PCB 110+115	mg/kg					B-37 1.5-2.0-0905		0.00509924		-		-	
PCB 111	mg/kg					-		-		0.000089345		0.00010117	
PCB 118	mg/kg	.00012		mg/kg		B-37 1.5-2.0-0905		0.002689175		-		-	
PCB 12+13	mg/kg					B-37 1.5-2.0-0905		0.0000966		0.000008934		0.000008934	
PCB 120	mg/kg					-		-		0.000044672		0.000050585	
PCB 121	mg/kg					-		-		0.000044672		0.000050585	
PCB 122+114	mg/kg	.00017		mg/kg		B-37 1.5-2.0-0905		0.000187415		-		-	
PCB 126	mg/kg	.00000005		mg/kg		B-37 1.5-2.0-0905		0.000021245		-		-	
PCB 127	mg/kg					-		-		0.000089345		0.00010117	
PCB 128+166	mg/kg					B-37 1.5-2.0-0905		0.00031773		-		-	
PCB 129+138+160+163	mg/kg					B-37 1.5-2.0-0905		0.001903795		-		-	
PCB 130+137+164	mg/kg					B-37 1.5-2.0-0905		0.00009856		-		-	
PCB 131+142	mg/kg					B-37 1.5-2.0-0905		0.000030105		-		-	
PCB 132	mg/kg					B-37 1.5-2.0-0905		0.000995685		-		-	
PCB 133	mg/kg					B-37 1.5-2.0-0905		0.000023255		-		-	
PCB 135+151+154	mg/kg					B-37 1.5-2.0-0905		0.00098436		-		-	
PCB 136	mg/kg					B-37 1.5-2.0-0905		0.00027792		-		-	

Table 1 Summary of Surface Soil (0-3 feet bgs) Results

Chemical Name	Unit	PHSL (toxicity)	PHSL (bio- accumulation)	Action Level Unit	Location ID	Sample ID	Sample Date	Sample Matrix	Sample Type	Date/ID for Min Concentration	Average Detected Concentration	Min DL for NonDetects	Max DL for NonDetects
PCB 139+140	mg/kg				B-37 1.5-2.0-0905					0.00002774	-	-	-
PCB 14	mg/kg				-					-	0.000008934	0.000010117	
PCB 143	mg/kg				B-37 1.5-2.0-0905					0.000071685	-	-	-
PCB 144	mg/kg				S-57a-0905					0.0001134	-	-	-
PCB 145	mg/kg				-					-	0.000089345	0.00010117	
PCB 146+161	mg/kg				B-37 1.5-2.0-0905					0.00024514	-	-	-
PCB 147+134+149	mg/kg				B-37 1.5-2.0-0905					0.00282337	-	-	-
PCB 148	mg/kg				B-37 1.5-2.0-0905					0.000002485	-	-	-
PCB 15	mg/kg				S-57a-0905					0.00028763	-	-	-
PCB 152+150	mg/kg				B-37 1.5-2.0-0905					0.000000925	-	-	-
PCB 153+168+141	mg/kg				B-37 1.5-2.0-0905					0.001474125	-	-	-
PCB 155	mg/kg				-					-	0.000089345	0.00010117	
PCB 156+157	mg/kg	.00021	mg/kg		B-37 1.5-2.0-0905					0.00017738	-	-	-
PCB 158	mg/kg				B-37 1.5-2.0-0905					0.00015646	-	-	-
PCB 159	mg/kg				B-37 1.5-2.0-0905					0.00001525	-	-	-
PCB 162	mg/kg				B-37 1.5-2.0-0905					0.000012305	-	-	-
PCB 163	mg/kg				B-37 1.5-2.0-0905					0.000301855	-	-	-
PCB 165	mg/kg				-					-	0.000089345	0.00010117	
PCB 167	mg/kg	.00021	mg/kg		B-37 1.5-2.0-0905					0.00006927	-	-	-
PCB 169	mg/kg	.00000021	mg/kg		-					-	0.000044672	0.000050585	
PCB 17	mg/kg				S-57a-0905					0.000374205	-	-	-
PCB 170	mg/kg				B-37 1.5-2.0-0905					0.000444705	-	-	-
PCB 172	mg/kg				S-57a-0905					0.00007233	-	-	-
PCB 175	mg/kg				-					-	0.000089345	0.00010117	
PCB 176	mg/kg				B-37 1.5-2.0-0905					0.00009318	-	-	-
PCB 178	mg/kg				B-37 1.5-2.0-0905					0.00039073	-	-	-
PCB 179	mg/kg				B-37 1.5-2.0-0905					0.000233335	-	-	-
PCB 18+30	mg/kg				S-57a-0905					0.000567715	-	-	-
PCB 180+193	mg/kg				B-37 1.5-2.0-0905					0.000976215	-	-	-
PCB 181+171+173	mg/kg				B-37 1.5-2.0-0905					0.0001659	-	-	-
PCB 183+174+185	mg/kg				B-37 1.5-2.0-0905					0.002104625	-	-	-
PCB 184	mg/kg				-					-	0.000089345	0.00010117	
PCB 186	mg/kg				-					-	0.000089345	0.00010117	
PCB 187+182	mg/kg				B-37 1.5-2.0-0905					0.001470405	-	-	-
PCB 188	mg/kg				-					-	0.000044672	0.000050585	
PCB 189	mg/kg	.0012	mg/kg		B-37 1.5-2.0-0905					0.000011395	-	-	-
PCB 19	mg/kg				S-57a-0905					0.000185455	-	-	-
PCB 190	mg/kg				B-37 1.5-2.0-0905					0.000066435	-	-	-

Table 1 Summary of Surface Soil (0-3 feet bgs) Results

Chemical Name	Unit	PHSL (toxicity)	PHSL (bio- accumulation)	Action Level Unit	Location ID	Sample ID	Sample Date	Sample Matrix	Sample Type	Date/ID for Min Concentration	Average Detected Concentration	Min DL for NonDetects	Max DL for NonDetects
PCB 191	mg/kg				B-37 1.5-2.0-0905					0.00001485	-	-	-
PCB 192	mg/kg				-					-	0.000089345	0.00010117	
PCB 194	mg/kg				B-37 1.5-2.0-0905					0.000197935	-	-	-
PCB 195	mg/kg				B-37 1.5-2.0-0905					0.00008968	-	-	-
PCB 196+203	mg/kg				B-37 1.5-2.0-0905					0.000584775	-	-	-
PCB 197+200	mg/kg				B-37 1.5-2.0-0905					0.000046965	-	-	-
PCB 198+199	mg/kg				B-37 1.5-2.0-0905					0.00040291	-	-	-
PCB 2	mg/kg				S-57a-0905					0.00004301	-	-	-
PCB 20+21+28+33	mg/kg				S-57a-0905					0.00143471	-	-	-
PCB 201	mg/kg				B-37 1.5-2.0-0905					0.00006193	-	-	-
PCB 202	mg/kg				B-37 1.5-2.0-0905					0.00006828	-	-	-
PCB 204	mg/kg				S-57a-0905					0.000012825	-	-	-
PCB 205	mg/kg				B-37 1.5-2.0-0905					0.000009365	-	-	-
PCB 206	mg/kg				B-37 1.5-2.0-0905					0.000212675	-	-	-
PCB 207	mg/kg				B-37 1.5-2.0-0905					0.00002227	-	-	-
PCB 208	mg/kg				B-37 1.5-2.0-0905					0.00006622	-	-	-
PCB 209	mg/kg				S-57a-0905					0.00011042	-	-	-
PCB 22	mg/kg				B-37 1.5-2.0-0905					0.000940525	-	-	-
PCB 25	mg/kg				B-37 1.5-2.0-0905					0.00042355	-	-	-
PCB 26+29	mg/kg				S-57a-0905					0.000242775	-	-	-
PCB 27+16+24	mg/kg				S-57a-0905					0.00010798	-	-	-
PCB 3	mg/kg				S-57a-0905					0.00002238	-	-	-
PCB 31	mg/kg				B-37 1.5-2.0-0905					0.00264373	-	-	-
PCB 32	mg/kg				B-37 1.5-2.0-0905					0.00081482	-	-	-
PCB 34+23	mg/kg				-					-	0.000017869	0.000020234	
PCB 35	mg/kg				S-57a-0905					0.000076485	-	-	-
PCB 36	mg/kg				B-37 1.5-2.0-0905					0.00005995	-	-	-
PCB 37	mg/kg				B-37 1.5-2.0-0905					0.001459645	-	-	-
PCB 38	mg/kg				B-37 1.5-2.0-0905					0.000060865	-	-	-
PCB 39	mg/kg				B-37 1.5-2.0-0905					0.00022717	-	-	-
PCB 4	mg/kg				S-57a-0905					0.000037525	-	-	-
PCB 41+71+40	mg/kg				B-37 1.5-2.0-0905					0.00633998	-	-	-
PCB 44+47+65	mg/kg				B-37 1.5-2.0-0905					0.008808385	-	-	-
PCB 45+51	mg/kg				B-37 1.5-2.0-0905					0.00164652	-	-	-
PCB 46	mg/kg				B-37 1.5-2.0-0905					0.00052748	-	-	-
PCB 48	mg/kg				B-37 1.5-2.0-0905					0.00109679	0.000017869	0.000017869	
PCB 49+69	mg/kg				B-37 1.5-2.0-0905					0.00391656	-	-	-
PCB 5+8	mg/kg				S-57a-0905					0.000154285	-	-	-

Table 1 Summary of Surface Soil (0-3 feet bgs) Results

Chemical Name	Unit	PHSL (toxicity)	PHSL (bio- accumulation)	Action Level Unit	Location ID	Sample ID	Sample Date	Sample Matrix	Sample Type	Date/ID for Min Concentration	Average Detected Concentration	Min DL for NonDetects	Max DL for NonDetects
PCB 50+53	mg/kg				B-37 1.5-2.0-0905					0.00137812	-	-	-
PCB 52+43+73	mg/kg				B-37 1.5-2.0-0905					0.007835845	-	-	-
PCB 54	mg/kg				B-37 1.5-2.0-0905					0.00001459	-	-	-
PCB 56+60	mg/kg				B-37 1.5-2.0-0905					0.00437909	-	-	-
PCB 57	mg/kg				-					-	0.000044672	0.000050585	
PCB 58+67	mg/kg				S-57a-0905					0.0000625	0.000050585	0.000050585	
PCB 59+62+42+75	mg/kg				B-37 1.5-2.0-0905					0.001245135	-	-	-
PCB 6	mg/kg				S-57a-0905					0.000035425	-	-	-
PCB 63	mg/kg				B-37 1.5-2.0-0905					0.00010431	-	-	-
PCB 64	mg/kg				B-37 1.5-2.0-0905					0.004214345	-	-	-
PCB 66+55	mg/kg				B-37 1.5-2.0-0905					0.00733314	-	-	-
PCB 68	mg/kg				-					-	0.000044672	0.000050585	
PCB 7	mg/kg				S-57a-0905					0.000007825	-	-	-
PCB 70+61+74+76	mg/kg				B-37 1.5-2.0-0905					0.009978065	-	-	-
PCB 72	mg/kg				-					-	0.000044672	0.000050585	
PCB 77	mg/kg	.000052	mg/kg		B-37 1.5-2.0-0905					0.00047513	-	-	-
PCB 78	mg/kg				-					-	0.000044672	0.000050585	
PCB 79	mg/kg				-					-	0.000044672	0.000050585	
PCB 80	mg/kg				B-37 1.5-2.0-0905					0.00080056	0.000044672	0.000044672	
PCB 81	mg/kg	.000017	mg/kg		-					-	0.000044672	0.000050585	
PCB 82	mg/kg				B-37 1.5-2.0-0905					0.001238245	-	-	-
PCB 83+99+112	mg/kg				B-37 1.5-2.0-0905					0.00195765	-	-	-
PCB 84	mg/kg				B-37 1.5-2.0-0905					0.001563085	-	-	-
PCB 85+116+117	mg/kg				B-37 1.5-2.0-0905					0.00218142	-	-	-
PCB 86+87+97+108+119+125	mg/kg				B-37 1.5-2.0-0905					0.002037705	-	-	-
PCB 88+91	mg/kg				B-37 1.5-2.0-0905					0.001263645	-	-	-
PCB 89	mg/kg				B-37 1.5-2.0-0905					0.00011712	-	-	-
PCB 9	mg/kg				S-57a-0905					0.00000448	0.000005058	0.000005058	
PCB 90+101+113	mg/kg				B-37 1.5-2.0-0905					0.00272377	-	-	-
PCB 92	mg/kg				B-37 1.5-2.0-0905					0.00060555	-	-	-
PCB 93+100+98+102	mg/kg				B-37 1.5-2.0-0905					0.000361615	-	-	-
PCB 94	mg/kg				B-37 1.5-2.0-0905					0.000041375	-	-	-
PCB 95	mg/kg				B-37 1.5-2.0-0905					0.00598711	-	-	-
PCB 96	mg/kg				B-37 1.5-2.0-0905					0.00009028	-	-	-
Total PCB Congeners (Calculated)	mg/kg				B-37 1.5-2.0-0905					0.11813673	-	-	-

Table 1 Summary of Surface Soil (0-3 feet bgs) Results

					Location ID	Sample ID	Sample Date	Sample Matrix	Sample Type	Date/ID for Min Concentration	Average Detected Concentration	Min DL for NonDetects	Max DL for NonDetects
Chemical Name	Unit	PHSL (toxicity)	PHSL (bio-accumulation)	Action Level Unit									
PCBs													
Aroclor 1016	mg/kg	.53		mg/kg	-	-				0.0091	8.7		
Aroclor 1221	mg/kg				-	-				0.0071	1.6		
Aroclor 1232	mg/kg				-	-				0.0091	3.5		
Aroclor 1242	mg/kg				-	-				0.0062	1.4		
Aroclor 1248	mg/kg	1.5		mg/kg	S25-S00178	0.470714286				0.0043	0.91		
Aroclor 1254	mg/kg	.3		mg/kg	S-55a-0805	0.492928571				0.0088	1.8		
Aroclor 1260	mg/kg	.2		mg/kg	S40-S00185	19.09				0.0047	0.091		
Total PCB (Calculated) 1	mg/kg	.676	.00039	mg/kg	S-55a-0805	11.11843902				0.019	0.19		
PAHs													
2-Methylnaphthalene	mg/kg	.2		mg/kg	B-37 1.5-2.0-0905	0.0785				0.012	0.012		
Acenaphthene	mg/kg	.3		mg/kg	B-37 1.5-2.0-0905	0.042				0.014	0.014		
Acenaphthylene	mg/kg	.2		mg/kg	B-37 1.5-2.0-0905	0.023				0.013	0.053		
Anthracene	mg/kg	.845		mg/kg	B-37 1.5-2.0-0905	0.023				0.015	0.058		
Benzo(a)anthracene	mg/kg	1.05		mg/kg	S002-055	0.038333333				0.013	0.51		
Benzo(a)pyrene	mg/kg	1.45		mg/kg	S002-053	0.0955				0.021	0.82		
Benzo(b)fluoranthene	mg/kg				S002-055	0.059				0.018	0.71		
Benzo(g,h,i)perylene	mg/kg	.3		mg/kg	B-37 1.5-2.0-0905	0.2				-	-		
Benzo(k)fluoranthene	mg/kg	13		mg/kg	S002-053	0.072				0.02	0.81		
Chrysene	mg/kg	1.29		mg/kg	S002-055	0.057				0.012	0.49		
Dibenz(a,h)anthracene	mg/kg	1.3		mg/kg	B-37 1.5-2.0-0905	0.019				0.028	1.2		
Dibenzofuran	mg/kg				B-37 1.5-2.0-0905	0.0054				-	-		
Fluoranthene	mg/kg	2.23	37	mg/kg	S002-052	0.0804				-	-		
Fluorene	mg/kg	.536		mg/kg	B-37 1.5-2.0-0905	0.0085				0.014	0.054		
Indeno(1,2,3-cd)pyrene	mg/kg	.1		mg/kg	S002-053	0.103				0.04	1.7		
Naphthalene	mg/kg	.561		mg/kg	B-37 1.5-2.0-0905	0.1335				0.015	0.015		
Phenanthrene	mg/kg	1.17		mg/kg	S002-053	0.115666667				0.011	0.011		
Pyrene	mg/kg	1.52	1.9	mg/kg	S002-055	0.063				0.015	0.58		
Grainsize													
Clay	PERCENT				S-59a-0905	4.143333333				-	-		
Gravel, Fine	PERCENT				S-55a-0805	3.77				-	-		
Gravel, Medium	PERCENT				S-57a-0905	17.15666667				-	-		
Sand, Coarse	PERCENT				S-55a-0805	12.06666667				-	-		
Sand, Fine	PERCENT				S-59a-0905	14.46666667				-	-		
Sand, Medium	PERCENT				S-59a-0905	23.2				-	-		
Sand, Very Coarse	PERCENT				S-57a-0905	2.74				-	-		
Sand, Very Fine	PERCENT				S-57a-0905	2.823333333				-	-		
Silt	PERCENT				S-59a-0905	18.4				-	-		

Table 1 Summary of Surface Soil (0-3 feet bgs) Results

					Location ID Sample ID Sample Date Sample Matrix Sample Type	Date/ID for Min Concentration	Average Detected Concentration	Min DL for NonDetects	Max DL for NonDetects
Chemical Name	Unit	PHSL (toxicity)	PHSL (bio- accumulation)	Action Level Unit					
NWTPH-Dx									
Diesel Range B	mg/kg				SO02-025	487.1882353	-	-	-
Residual Range C	mg/kg				SO02-052	1734.294118	-	-	-
Diesel Range Hydrocarbons	mg/Kg				TP19-2.25-2.5-0605	430	-	-	-
Residual Range Organics (RRO)	mg/Kg				TP19-2.25-2.5-0605	1200	-	-	-

Bold and Shaded	Detected result exceeds Upland Soil/Stormwater Sediment Scr
Bold and Inverted	Detected result exceeds Upland Soil/Stormwater Sediment Scr
Bold and Highlighted	Detected result exceeds both Upland Soil/Stormwater Sedimer
Bold and Blue	Detection Limit for ND exceeds one or both screening levels.

bgs - below ground surface

PHSL - Portland Harbor Screening Level

Total PCBs equal to sum of detected PCB aroclor values or the highest method reporting limit if all PCE

Table 2 Summary of Catch Basin Results

						Location ID SD-1 Sample ID SD-1_SO02-009 Sample Date 10/21/2002 Sample Matrix SO Sample Type N	SD-1 SD-3 SD-3_SO02-003D 10/18/2002 SO FD	SD-3 SD-3_SO02-003 10/18/2002 SO N	SD-4 SD-4_SO02-013 10/21/2002 SO N	SD-5 SD-5_SD0021 9/10/2001 SE FD	SD-5 SD-5_SO02-010 10/21/2002 SO N	SD-6 SD-6_SO02-008 10/21/2002 SO N
Chemical Name	Total/Dissolved	Unit	PHSL (toxicity)	PHSL (bio- accumulation)	Action Level unit							
Conventionals												
Total Solids	T	%				49	61	62	78	NA	46	86
Metals												
Arsenic	T	mg/kg	33	7	mg/kg	6 J	NA	3.8	4.2	4	3.6	3.6 J
Barium	T	mg/kg				340	NA	170	210	220	170	250
Boron	T	mg/kg				NA	NA	NA	NA	NA	NA	NA
Cadmium	T	mg/kg	4.98	1	mg/kg	< 0.6	NA	1.3	1.1	1.5	1.2	< 0.4
Chromium	T	mg/kg	111		mg/kg	850 J	NA	2,000	4,100	1,900	1,300	1,900 J
Cobalt	T	mg/kg				3.1	NA	7	8	8.9	8.2	4.6
Copper	T	mg/kg	149		mg/kg	96	NA	130	180	160	120	130
Lead	T	mg/kg	128	17	mg/kg	27 J	NA	54	38	98	68	18 J
Manganese	T	mg/kg	1100		mg/kg	7600 J	NA	15,000	36,000	15,000	11,000	14,000 J
Mercury	T	mg/kg				0.04	NA	0.09	0.06	0.17	0.14	0.02
Nickel	T	mg/kg				42	NA	51	67	54	39	35
Silver	T	mg/kg				< 1	NA	0.55	0.48	0.62	0.4	1 J
Titanium	T	mg/kg				NA	NA	NA	NA	NA	NA	NA
Vanadium	T	mg/kg				130	NA	210	590	290	180	240
Zinc	T	mg/kg	459		mg/kg	460	NA	420	430	1,800	880	150
PCBs												
Aroclor 1016	T	mg/kg	.53		mg/kg	< 0.52	< 0.067	< 0.065	< 0.11	< 0.16	NA	NA
Aroclor 1221	T	mg/kg				< 1.1	< 0.012	< 0.012	< 0.21	< 0.31	NA	NA
Aroclor 1232	T	mg/kg				< 0.52	< 0.027	< 0.026	< 0.11	< 0.16	NA	NA
Aroclor 1242	T	mg/kg				< 0.52	< 0.011	< 0.0099	< 0.11	< 0.16	NA	NA
Aroclor 1248	T	mg/kg	1.5		mg/kg	1.5	0.95	0.82	0.17	0.57	NA	NA
Aroclor 1254	T	mg/kg	.3		mg/kg	0.63	< 0.014	< 0.014	< 0.11	0.45	NA	NA
Aroclor 1260	T	mg/kg	.2		mg/kg	< 0.52 DL	< 0.0077	< 0.0075	< 0.11	< 0.16	NA	NA
Total PCB (Calculated)	T	mg/kg	.676	.00039	mg/kg	2.13	0.95	0.82	0.17	1.02	NA	NA
PAHs												
2-Methylnaphthalene	T	mg/kg	.2		mg/kg	< 0.023	0.098 J	0.073 J	0.13 J	NA	0.19 J	< 0.013
Acenaphthene	T	mg/kg	.3		mg/kg	< 0.028	0.11 J	0.1 J	0.087 J	NA	0.078 J	< 0.016
Acenaphthylene	T	mg/kg	.2		mg/kg	< 0.026	< 0.021	< 0.021	< 0.017	NA	< 0.028	< 0.015
Anthracene	T	mg/kg	.845		mg/kg	< 0.029	0.1 J	0.096 J	0.11 J	NA	0.22 J	< 0.017
Benzo(a)anthracene	T	mg/kg	1.05		mg/kg	0.066 J	0.28 J	0.22 J	0.2 J	NA	0.58 J	0.015 J
Benzo(a)pyrene	T	mg/kg	1.45		mg/kg	0.066 J	0.29 J	0.23 J	0.14 J	NA	0.37 J	< 0.023
Benzo(b)fluoranthene	T	mg/kg				0.093 J	0.43 J	0.33 J	0.33 J	NA	1 J	0.021 J
Benzo(g,h,i)perylene	T	mg/kg	.3		mg/kg	0.075 J	0.28 J	0.21 J	0.18 J	NA	0.55 J	< 0.024
Benzo(k)fluoranthene	T	mg/kg	13		mg/kg	0.068 J	0.2 J	0.19 J	0.16 J	NA	0.54 J	< 0.023

Table 2 Summary of Catch Basin Results

						Location ID SD-1 Sample ID SD-1_SO02-009 Sample Date 10/21/2002 Sample Matrix SO Sample Type N	SD-3 SD-3_SO02-003D 10/18/2002 SO FD	SD-3 SD-3_SO02-003 10/18/2002 SO N	SD-4 SD-4_SO02-013 10/21/2002 SO N	SD-5 SD-5_SD0021 9/10/2001 SE FD	SD-5 SD-5_SO02-010 10/21/2002 SO N	SD-6 SD-6_SO02-008 10/21/2002 SO N
Chemical Name	Total/Dissolved	Unit	PHSL (toxicity)	PHSL (bio- accumulation)	Action Level unit							
Chrysene	T	mg/kg	1.29		mg/kg	0.12 J	0.42	J	0.35	J	0.43	NA
Dibenz(a,h)anthracene	T	mg/kg	1.3		mg/kg	< 0.056	0.05	J	0.061	J	< 0.18	NA
Fluoranthene	T	mg/kg	2.23	37	mg/kg	0.15 J	0.72		0.58		0.54	NA
Fluorene	T	mg/kg	.536		mg/kg	< 0.027	0.11	J	0.098	J	0.11	J
Indeno(1,2,3-cd)pyrene	T	mg/kg	.1		mg/kg	< 0.08	0.23	J	0.18	J	< 0.26	NA
Naphthalene	T	mg/kg	.561		mg/kg	< 0.03	0.14	J	0.082	J	0.16	J
Phenanthrene	T	mg/kg	1.17		mg/kg	0.092 J	0.44	J	0.39	J	0.57	NA
Pyrene	T	mg/kg	1.52	1.9	mg/kg	0.2 J	0.92		0.81		0.82	NA
NWTPH-DX												
Diesel Range B	T	mg/kg				190 JN	270	JN	340	JN	480	JN
Residual Range C	T	mg/kg				1300 JN	1,900	JN	1,800	JN	3,400	JN
							6,100	JN	5,900	JN	70	JN

Bold and Shaded Detected result exceeds Upland Soil/Stormwater Sediment Screening Level (Toxicity)

Bold and Inverted Detected result exceeds Upland Soil/Stormwater Sediment Screening Level (Bioaccumulation)

Bold and Highlighted Detected result exceeds both Upland Soil/Stormwater Sediment Screening Levels (Bioaccumulation and Toxicity)

Bold and Blue Detection Limit for ND exceeds one or both screening levels.

PHSL - Portland Harbor Screening Level

Total PCBs equal to sum of detected PCB aroclor values or the highest method reporting limit if all PCB aroclors are non-detect

Table 2 Summary of Catch Basin Results

						Location ID SD-7_SO02-007 10/21/2002 SO N	SD-8 SD-8_SO02-005 10/18/2002 SO N	SD-9 SD-9_SO02-004 10/18/2002 SO N	SD-13 SD-13_SO02-002 10/18/2002 SO N	SD-14 SD-14_SO02-001 10/18/2002 SO N	SD-15 SD-15_SO02-048 10/23/2002 SO N	SD-16 SD-16_SO02-050 10/23/2002 SO FD
Chemical Name	Total/Dissolved	Unit	PHSL (toxicity)	PHSL (bio- accumulation)	Action Level unit							
Conventionals												
Total Solids	T	%				51	62	59	59	94	86	73
Metals												
Arsenic	T	mg/kg	33	7	mg/kg	4.8 J	12 J	5.2 J	5.8 J	7 J	5.1 J	7.4
Barium	T	mg/kg				510	180	210	180	75	240	91
Boron	T	mg/kg				NA	NA	NA	NA	NA	NA	33
Cadmium	T	mg/kg	4.98	1	mg/kg	< 0.7	1.5	0.5 J	1.6	1.4	1.6	14
Chromium	T	mg/kg	111		mg/kg	7,000 J	1,700 J	790 J	1,500 J	370 J	3,700 J	860 J
Cobalt	T	mg/kg				5.6	14	6.5	7.9	12	10	13
Copper	T	mg/kg	149		mg/kg	250	450	65	220	160	240	430
Lead	T	mg/kg	128	17	mg/kg	39	86	22 J	64	89	180	650
Manganese	T	mg/kg	1100		mg/kg	68,000 J	15,000 J	5,300 J	14,000 J	3,200 J	31,000 J	7,700 J
Mercury	T	mg/kg				0.01 J	0.16	0.04	0.05	0.04	0.01 J	0.16
Nickel	T	mg/kg				54	160	36	86	68	33	160
Silver	T	mg/kg				5.1 J	0.7 J	< 0.8	< 0.8	< 0.7	3.3 J	3.1
Titanium	T	mg/kg				NA	NA	NA	NA	NA	NA	810
Vanadium	T	mg/kg				960	210	110	210	120	530	130
Zinc	T	mg/kg	459		mg/kg	160	1,200	260	790	330	1,100	2,100
PCBs												
Aroclor 1016	T	mg/kg	.53		mg/kg	< 0.079	< 0.066	< 0.068	< 0.068	< 0.043	< 0.047	NA
Aroclor 1221	T	mg/kg				< 0.014	< 0.012	< 0.012	< 0.012	< 0.0075	< 0.0082	NA
Aroclor 1232	T	mg/kg				< 0.032	< 0.027	< 0.028	< 0.028	< 0.018	< 0.019	NA
Aroclor 1242	T	mg/kg				< 0.012	< 0.01	< 0.011	< 0.011	< 0.0066	< 0.0072	NA
Aroclor 1248	T	mg/kg	1.5		mg/kg	0.053 J	1.1	0.25	< 0.0071	< 0.0045	< 0.005	NA
Aroclor 1254	T	mg/kg	.3		mg/kg	< 0.017	< 0.014	< 0.014	0.11 J	0.092 J	0.018 J	NA
Aroclor 1260	T	mg/kg	.2		mg/kg	< 0.0091	< 0.0075	< 0.0078	< 0.0078	< 0.005	< 0.0054	NA
Total PCB (Calculated)	T	mg/kg	.676	.00039	mg/kg	0.053	1.1	0.25	0.11	0.092	0.018	NA
PAHs												
2-Methylnaphthalene	T	mg/kg	.2		mg/kg	< 0.022	0.049 J	< 0.019	0.086 J	< 0.012	< 0.013	NA
Acenaphthene	T	mg/kg	.3		mg/kg	< 0.027	< 0.022	< 0.023	0.024 J	< 0.015	< 0.016	NA
Acenaphthylene	T	mg/kg	.2		mg/kg	< 0.025	< 0.021	< 0.022	< 0.022	< 0.014	< 0.015	NA
Anthracene	T	mg/kg	.845		mg/kg	< 0.028	0.03 J	0.038 J	0.046 J	< 0.015	< 0.017	NA
Benzo(a)anthracene	T	mg/kg	1.05		mg/kg	0.027 J	0.24 J	0.12 J	0.12 J	0.027 J	< 0.015	NA
Benzo(a)pyrene	T	mg/kg	1.45		mg/kg	< 0.039	0.23 J	0.074 J	0.097 J	0.023 J	< 0.024	NA
Benzo(b)fluoranthene	T	mg/kg				0.039 J	0.46 J	0.13 J	0.21 J	0.032 J	< 0.021	NA
Benzo(g,h,i)perylene	T	mg/kg	.3		mg/kg	0.048 J	0.25 J	0.054 J	0.27 J	0.04 J	< 0.024	NA
Benzo(k)fluoranthene	T	mg/kg	13		mg/kg	< 0.039	0.21 J	0.082 J	0.1 J	0.025 J	< 0.023	NA

Table 2 Summary of Catch Basin Results

						Location ID SD-7_SO02-007 10/21/2002 SO N	SD-8 SD-8_SO02-005 10/18/2002 SO N	SD-9 SD-9_SO02-004 10/18/2002 SO N	SD-13 SD-13_SO02-002 10/18/2002 SO N	SD-14 SD-14_SO02-001 10/18/2002 SO N	SD-15 SD-15_SO02-048 10/23/2002 SO N	SD-16 SD-16_SO02-050 10/23/2002 SO FD
Chemical Name	Total/Dissolved	Unit	PHSL (toxicity)	PHSL (bio- accumulation)	Action Level unit							
Chrysene	T	mg/kg	1.29		mg/kg	0.045 J	0.49 J	0.16 J	0.31 J	0.035 J	< 0.014	NA
Dibenz(a,h)anthracene	T	mg/kg	1.3		mg/kg	< 0.055	0.053 J	< 0.047	< 0.047	< 0.03	< 0.033	NA
Fluoranthene	T	mg/kg	2.23	37	mg/kg	0.056 J	0.27 J	0.37 J	0.26 J	0.035 J	< 0.014	NA
Fluorene	T	mg/kg	.536		mg/kg	< 0.026	< 0.022	< 0.022	0.039 J	< 0.014	< 0.016	NA
Indeno(1,2,3-cd)pyrene	T	mg/kg	.1		mg/kg	< 0.077	0.2 J	< 0.066	0.11 J	< 0.042	< 0.046	NA
Naphthalene	T	mg/kg	.561		mg/kg	< 0.029	0.18 J	< 0.025	0.079 J	< 0.016	< 0.017	NA
Phenanthrene	T	mg/kg	1.17		mg/kg	0.037 J	0.14 J	0.18 J	0.32 J	0.025 J	< 0.012	NA
Pyrene	T	mg/kg	1.52	1.9	mg/kg	0.063 J	0.35 J	0.34 J	0.54 J	0.041 J	< 0.017	NA
NWTPH-DX												
Diesel Range B	T	mg/kg				27 JN	140 JN	68 JN	900 JN	59 JN	16 JN	NA
Residual Range C	T	mg/kg				150 JN	810 JN	360 JN	5,900 JN	440 JN	67 JN	NA

Bold and Shaded Detected result exceeds Upland Soil/Stormwater Sediment Screening Level (Toxic
Bold and Inverted Detected result exceeds Upland Soil/Stormwater Sediment Screening Level (Bioac
Bold and Highlighted Detected result exceeds both Upland Soil/Stormwater Sediment Screening Levels
Bold and Blue Detection Limit for ND exceeds one or both screening levels.

PHSL - Portland Harbor Screening Level

Total PCBs equal to sum of detected PCB aroclor values or the highest method reporting limit if all PCB aroclor

Table 2 Summary of Catch Basin Results

						Location ID SD-16 SD-16_SO02-049 10/23/2002 SO N	SD-17 SD-17_SO02-047 10/23/2002 SO N	SD-19 SD-19_SO02-014 10/21/2002 SO N	SD-20 SD-20_SO02-012 10/21/2002 SO N	SD-21 SD-21_SO02-011 10/21/2002 SO N	Samples	Detects	Non-Detects
Chemical Name	Total/Dissolved	Unit	PHSL (toxicity)	PHSL (bio- accumulation)	Action Level unit								
Conventionals													
Total Solids	T	%				70	92	71	69	70	18	18	0
Metals													
Arsenic	T	mg/kg	33	7	mg/kg	8.5	0.6 J	3.3 J	9.3 J	6.8 J	18	18	0
Barium	T	mg/kg				95	270	210	270	230	18	18	0
Boron	T	mg/kg				30	NA	NA	NA	NA	2	2	0
Cadmium	T	mg/kg	4.98	1	mg/kg	11	< 0.4	< 0.4	0.9 J	0.5 J	18	13	5
Chromium	T	mg/kg	111		mg/kg	890 J	4,100 J	3,400 J	1,500 J	300 J	18	18	0
Cobalt	T	mg/kg				13	2.4	8.2	13	15	18	18	0
Copper	T	mg/kg	149		mg/kg	460	120	190	180	58	18	18	0
Lead	T	mg/kg	128	17	mg/kg	670	22	60	80	15 J	18	18	0
Manganese	T	mg/kg	1100		mg/kg	8,100 J	39,000 J	28,000 J	14,000 J	3,800 J	18	18	0
Mercury	T	mg/kg				0.16	0.01 J	0.07	0.14	0.04	18	18	0
Nickel	T	mg/kg				170	32	72	69	28	18	18	0
Silver	T	mg/kg				< 0.8	< 0.6	2.6	< 0.7	< 0.8	18	10	8
Titanium	T	mg/kg				950	NA	NA	NA	NA	2	2	0
Vanadium	T	mg/kg				120	640	380	240	120	18	18	0
Zinc	T	mg/kg	459		mg/kg	2,400	110	420	2,000	300	18	18	0
PCBs													
Aroclor 1016	T	mg/kg	.53		mg/kg	< 0.058	< 0.044	< 0.057	< 0.058	< 0.058	16	0	16
Aroclor 1221	T	mg/kg				< 0.01	< 0.0077	< 0.0099	< 0.011	< 0.011	16	0	16
Aroclor 1232	T	mg/kg				< 0.023	< 0.018	< 0.023	< 0.024	< 0.023	16	0	16
Aroclor 1242	T	mg/kg				< 0.0088	< 0.0067	< 0.0086	< 0.0089	< 0.0088	16	0	16
Aroclor 1248	T	mg/kg	1.5		mg/kg	< 0.006	< 0.0046	< 0.006	< 0.0061	< 0.0061	16	8	8
Aroclor 1254	T	mg/kg	.3		mg/kg	0.087 J	0.095 J	0.093 J	0.26	0.035 J	16	10	6
Aroclor 1260	T	mg/kg	.2		mg/kg	< 0.0066	< 0.005	< 0.0065	< 0.0067	< 0.0066	16	0	16
Total PCB (Calculated)	T	mg/kg	.676	.00039	mg/kg	0.087	0.095	0.093	0.26	0.035	16	16	0
PAHs													
2-Methylnaphthalene	T	mg/kg	.2		mg/kg	0.035 J	< 0.012	0.038 J	0.061 J	< 0.016	17	9	8
Acenaphthene	T	mg/kg	.3		mg/kg	< 0.02	< 0.015	< 0.019	0.044 J	< 0.02	17	6	11
Acenaphthylene	T	mg/kg	.2		mg/kg	< 0.019	< 0.014	< 0.018	< 0.019	< 0.019	17	0	17
Anthracene	T	mg/kg	.845		mg/kg	0.035 J	< 0.016	0.031 J	0.067 J	< 0.02	17	10	7
Benzo(a)anthracene	T	mg/kg	1.05		mg/kg	< 0.18	< 0.014	0.056 J	0.13 J	0.047 J	17	14	3
Benzo(a)pyrene	T	mg/kg	1.45		mg/kg	< 0.29	< 0.022	0.068 J	0.12 J	0.095 J	17	12	5
Benzo(b)fluoranthene	T	mg/kg				< 0.25	< 0.019	0.1 J	0.26 J	0.086 J	17	14	3
Benzo(g,h,i)perylene	T	mg/kg	.3		mg/kg	< 0.29	< 0.022	0.13 J	0.28 J	0.12 J	17	13	4
Benzo(k)fluoranthene	T	mg/kg	13		mg/kg	< 0.28	< 0.022	0.053 J	0.14 J	0.068 J	17	12	5

Table 2 Summary of Catch Basin Results

						Location ID SD-16 SD-16_SO02-049 10/23/2002 SO N	SD-17 SD-17_SO02-047 10/23/2002 SO N	SD-19 SD-19_SO02-014 10/21/2002 SO N	SD-20 SD-20_SO02-012 10/21/2002 SO N	SD-21 SD-21_SO02-011 10/21/2002 SO N	Samples	Detects	Non-Detects
Chemical Name	Total/Dissolved	Unit	PHSL (toxicity)	PHSL (bio- accumulation)	Action Level unit								
Chrysene	T	mg/kg	1.29		mg/kg	0.25 J	0.016 J	0.097 J	0.27 J	0.061 J	17	16	1
Dibenz(a,h)anthracene	T	mg/kg	1.3		mg/kg	< 0.4	< 0.03	< 0.039	0.076 J	< 0.04	17	4	13
Fluoranthene	T	mg/kg	2.23	37	mg/kg	0.15 J	0.02 J	0.11 J	0.24 J	0.059 J	17	16	1
Fluorene	T	mg/kg	.536		mg/kg	0.022 J	< 0.015	0.019 J	0.041 J	< 0.019	17	8	9
Indeno(1,2,3-cd)pyrene	T	mg/kg	.1		mg/kg	< 0.56	< 0.043	0.075 J	0.19 J	0.097 J	17	7	10
Naphthalene	T	mg/kg	.561		mg/kg	0.078 J	< 0.016	0.036 J	0.05 J	< 0.021	17	9	8
Phenanthrene	T	mg/kg	1.17		mg/kg	0.18 J	0.03 J	0.13 J	0.22 J	0.036 J	17	16	1
Pyrene	T	mg/kg	1.52	1.9	mg/kg	0.39 J	0.025 J	0.13 J	0.42 J	0.093 J	17	16	1
NWTPH-DX													
Diesel Range B	T	mg/kg				1,500 JN	160 JN	46 JN	260 JN	18 JN	18	18	0
Residual Range C	T	mg/kg				7,900 JN	990 JN	440 JN	2,100 JN	110 JN	18	18	0

Bold and Shaded Detected result exceeds Upland Soil/Stormwater Sediment Screening Level (Toxic)

Bold and Inverted Detected result exceeds Upland Soil/Stormwater Sediment Screening Level (Bioac)

Bold and Highlighted Detected result exceeds both Upland Soil/Stormwater Sediment Screening Levels

Bold and Blue Detection Limit for ND exceeds one or both screening levels.

PHSL - Portland Harbor Screening Level

Total PCBs equal to sum of detected PCB aroclor values or the highest method reporting limit if all PCB aroclor

Table 2 Summary of Catch Basin Results

Location ID Sample ID Sample Date Sample Matrix Sample Type										Summary Statistics	
Chemical Name	Total/Dissolved	Unit	PHSL (toxicity)	PHSL (bio-accumulation)	Action Level unit	Exceedances	DL Exceedances	Max Detected Concentration	Date/ID for Max Concentration	Min Detected Concentration	
Conventionals											
Total Solids	T	%				0	0	94	SD-14_SO02-001	46	
Metals											
Arsenic	T	mg/kg	33	7	mg/kg	4	0	12	SD-8_SO02-005	0.6	
Barium	T	mg/kg				0	0	510	SD-7_SO02-007	75	
Boron	T	mg/kg				0	0	33	SD-16_SO02-050	30	
Cadmium	T	mg/kg	4.98	1	mg/kg	10	0	14	SD-16_SO02-050	0.5	
Chromium	T	mg/kg	111		mg/kg	18	0	7000	SD-7_SO02-007	300	
Cobalt	T	mg/kg				0	0	15	SD-21_SO02-011	2.4	
Copper	T	mg/kg	149		mg/kg	11	0	460	SD-16_SO02-049	58	
Lead	T	mg/kg	128	17	mg/kg	16	0	670	SD-16_SO02-049	15	
Manganese	T	mg/kg	1100		mg/kg	18	0	68000	SD-7_SO02-007	3200	
Mercury	T	mg/kg				0	0	0.17	SD-5_SD0021	0.01	
Nickel	T	mg/kg				0	0	170	SD-16_SO02-049	28	
Silver	T	mg/kg				0	0	5.1	SD-7_SO02-007	0.4	
Titanium	T	mg/kg				0	0	950	SD-16_SO02-049	810	
Vanadium	T	mg/kg				0	0	960	SD-7_SO02-007	110	
Zinc	T	mg/kg	459		mg/kg	9	0	2400	SD-16_SO02-049	110	
PCBs											
Aroclor 1016	T	mg/kg	.53		mg/kg	0	0	-	-	-	
Aroclor 1221	T	mg/kg				0	0	-	-	-	
Aroclor 1232	T	mg/kg				0	0	-	-	-	
Aroclor 1242	T	mg/kg				0	0	-	-	-	
Aroclor 1248	T	mg/kg	1.5		mg/kg	0	0	1.5	SD-1_SO02-009	0.053	
Aroclor 1254	T	mg/kg	.3		mg/kg	2	0	0.63	SD-1_SO02-009	0.018	
Aroclor 1260	T	mg/kg	.2		mg/kg	0	0	-	-	-	
Total PCB (Calculated)	T	mg/kg	.676	.00039	mg/kg	16	0	2.13	SD-1_SO02-009	0.018	
PAHs											
2-Methylnaphthalene	T	mg/kg	.2		mg/kg	0	0	0.19	SD-5_SO02-010	0.035	
Acenaphthene	T	mg/kg	.3		mg/kg	0	0	0.11	SD-3_SO02-003D	0.024	
Acenaphthylene	T	mg/kg	.2		mg/kg	0	0	-	-	-	
Anthracene	T	mg/kg	.845		mg/kg	0	0	0.22	SD-5_SO02-010	0.03	
Benzo(a)anthracene	T	mg/kg	1.05		mg/kg	0	0	0.58	SD-5_SO02-010	0.015	
Benzo(a)pyrene	T	mg/kg	1.45		mg/kg	0	0	0.37	SD-5_SO02-010	0.023	
Benzo(b)fluoranthene	T	mg/kg				0	0	1	SD-5_SO02-010	0.021	
Benzo(g,h,i)perylene	T	mg/kg	.3		mg/kg	1	0	0.55	SD-5_SO02-010	0.04	
Benzo(k)fluoranthene	T	mg/kg	13		mg/kg	0	0	0.54	SD-5_SO02-010	0.025	

Table 2 Summary of Catch Basin Results

Location ID Sample ID Sample Date Sample Matrix Sample Type										Summary Statistics
Chemical Name	Total/Dissolved	Unit	PHSL (toxicity)	PHSL (bio-accumulation)	Action Level unit	Exceedances	DL Exceedances	Max Detected Concentration	Date/ID for Max Concentration	Min Detected Concentration
Chrysene	T	mg/kg	1.29		mg/kg	1	0	1.3	SD-5_SO02-010	0.016
Dibenz(a,h)anthracene	T	mg/kg	1.3		mg/kg	0	0	0.076	SD-20_SO02-012	0.05
Fluoranthene	T	mg/kg	2.23	37	mg/kg	0	0	1.5	SD-5_SO02-010	0.02
Fluorene	T	mg/kg	.536		mg/kg	0	0	0.11	SD-5_SO02-010	0.019
Indeno(1,2,3-cd)pyrene	T	mg/kg	.1		mg/kg	5	3	0.23	SD-3_SO02-003D	0.075
Naphthalene	T	mg/kg	.561		mg/kg	0	0	0.2	SD-5_SO02-010	0.036
Phenanthrene	T	mg/kg	1.17		mg/kg	0	0	0.99	SD-5_SO02-010	0.012
Pyrene	T	mg/kg	1.52	1.9	mg/kg	1	0	2.2	SD-5_SO02-010	0.025
NWTPH-DX										
Diesel Range B	T	mg/kg				0	0	1500	SD-16_SO02-049	9.9
Residual Range C	T	mg/kg				0	0	7900	SD-16_SO02-049	67

Bold and Shaded Detected result exceeds Upland Soil/Stormwater Sediment Screening Level (Toxic

Bold and Inverted Detected result exceeds Upland Soil/Stormwater Sediment Screening Level (Bioac

Bold and Highlighted Detected result exceeds both Upland Soil/Stormwater Sediment Screening Levels

Bold and Blue Detection Limit for ND exceeds one or both screening levels.

PHSL - Portland Harbor Screening Level

Total PCBs equal to sum of detected PCB aroclor values or the highest method reporting limit if all PCB aroclor

Table 2 Summary of Catch Basin Results

						Location ID	Sample ID	Sample Date	Sample Matrix	Sample Type	Date/ID for Min Concentration	Average Detected Concentration	Min DL for NonDetects	Max DL for NonDetects
Chemical Name	Total/Dissolved	Unit	PHSL (toxicity)	PHSL (bio-accumulation)	Action Level unit									
Conventionals														
Total Solids	T	%				SD-5_SO02-010	69.94117647				-	-	-	
Metals														
Arsenic	T	mg/kg	33	7	mg/kg	SD-17_SO02-047	5.588235294				-	-	-	
Barium	T	mg/kg				SD-14_SO02-001	210.6470588				-	-	-	
Boron	T	mg/kg				SD-16_SO02-049	31.5				-	-	-	
Cadmium	T	mg/kg	4.98	1	mg/kg	SD-21_SO02-011	2.930769231	0.4	0.7					
Chromium	T	mg/kg	111		mg/kg	SD-21_SO02-011	2194.705882				-	-	-	
Cobalt	T	mg/kg				SD-17_SO02-047	9.252941176				-	-	-	
Copper	T	mg/kg	149		mg/kg	SD-21_SO02-011	208.4117647				-	-	-	
Lead	T	mg/kg	128	17	mg/kg	SD-21_SO02-011	132.5294118				-	-	-	
Manganese	T	mg/kg	1100		mg/kg	SD-14_SO02-001	19300				-	-	-	
Mercury	T	mg/kg				SD-17_SO02-047	0.078333333				-	-	-	
Nickel	T	mg/kg				SD-21_SO02-011	69.77777778				-	-	-	
Silver	T	mg/kg				SD-5_SO02-010	1.785	0.6	1					
Titanium	T	mg/kg				SD-16_SO02-050	880				-	-	-	
Vanadium	T	mg/kg				SD-9_SO02-004	300.5555556				-	-	-	
Zinc	T	mg/kg	459		mg/kg	SD-17_SO02-047	850.5555556				-	-	-	
PCBs														
Aroclor 1016	T	mg/kg	.53		mg/kg	-	-				0.043	0.52		
Aroclor 1221	T	mg/kg				-	-				0.0075	1.1		
Aroclor 1232	T	mg/kg				-	-				0.018	0.52		
Aroclor 1242	T	mg/kg				-	-				0.0066	0.52		
Aroclor 1248	T	mg/kg	1.5		mg/kg	SD-7_SO02-007	0.676625				0.0045	0.0071		
Aroclor 1254	T	mg/kg	.3		mg/kg	SD-15_SO02-048	0.187				0.014	0.11		
Aroclor 1260	T	mg/kg	.2		mg/kg	-	-				0.005	0.52		
Total PCB (Calculated)	T	mg/kg	.676	.00039	mg/kg	SD-15_SO02-048	0.4551875				-	-		
PAHs														
2-Methylnaphthalene	T	mg/kg	.2		mg/kg	SD-16_SO02-049	0.084444444	0.012	0.023					
Acenaphthene	T	mg/kg	.3		mg/kg	SD-13_SO02-002	0.073833333	0.015	0.028					
Acenaphthylene	T	mg/kg	.2		mg/kg	-	-				0.014	0.028		
Anthracene	T	mg/kg	.845		mg/kg	SD-8_SO02-005	0.0773	0.015	0.028					
Benzo(a)anthracene	T	mg/kg	1.05		mg/kg	SD-6_SO02-008	0.152	0.014	0.18					
Benzo(a)pyrene	T	mg/kg	1.45		mg/kg	SD-14_SO02-001	0.15025	0.022	0.29					
Benzo(b)fluoranthene	T	mg/kg				SD-6_SO02-008	0.2515	0.019	0.25					
Benzo(g,h,i)perylene	T	mg/kg	.3		mg/kg	SD-14_SO02-001	0.191307692	0.022	0.29					
Benzo(k)fluoranthene	T	mg/kg	13		mg/kg	SD-14_SO02-001	0.153	0.022	0.28					

Table 2 Summary of Catch Basin Results

Chemical Name	Total/Dissolved	Unit	PHSL (toxicity)	PHSL (bio- accumulation)	Action Level unit	Location ID	Sample ID	Sample Date	Sample Matrix	Sample Type	Date/ID for Min Concentration	Average Detected Concentration	Min DL for NonDetects	Max DL for NonDetects
Chrysene	T	mg/kg	1.29		mg/kg	SD-17_SO02-047					0.2739375	0.014	0.014	
Dibenz(a,h)anthracene	T	mg/kg	1.3		mg/kg	SD-3_SO02-003D					0.06	0.03	0.4	
Fluoranthene	T	mg/kg	2.23	37	mg/kg	SD-17_SO02-047					0.318875	0.014	0.014	
Fluorene	T	mg/kg	.536		mg/kg	SD-19_SO02-014					0.068625	0.014	0.027	
Indeno(1,2,3-cd)pyrene	T	mg/kg	.1		mg/kg	SD-19_SO02-014					0.154571429	0.042	0.56	
Naphthalene	T	mg/kg	.561		mg/kg	SD-19_SO02-014					0.111666667	0.016	0.029	
Phenanthrene	T	mg/kg	1.17		mg/kg	SD-6_SO02-008					0.237	0.012	0.012	
Pyrene	T	mg/kg	1.52	1.9	mg/kg	SD-17_SO02-047					0.4618125	0.017	0.017	
NWTPH-DX														
Diesel Range B	T	mg/kg				SD-6_SO02-008					365.7722222	-	-	
Residual Range C	T	mg/kg				SD-15_SO02-048					2207.611111	-	-	

Bold and Shaded

Detected result exceeds Upland Soil/Stormwater Sediment Screening Level (Toxic)

Bold and Inverted

Detected result exceeds Upland Soil/Stormwater Sediment Screening Level (Bioac)

Bold and Highlighted

Detected result exceeds both Upland Soil/Stormwater Sediment Screening Levels

Bold and Blue

Detection Limit for ND exceeds one or both screening levels.

PHSL - Portland Harbor Screening Level

Total PCBs equal to sum of detected PCB aroclor values or the highest method reporting limit if all PCB aroclor